# **Operating Manual**

Model Nos. TMO-33920A TMO-33921A

Montgomery Ward

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Dear Customer.

So often throughout the year we are all in a rush to meet our daily obligations.

However, we at Montgomery Ward are taking a quick moment out to say...

"Thank you for your business."

Sincerely, MONTGOMERY WARD



INSTRUCTIONS GIVEN WITH THIS SYMBOL ARE FOR PERSONAL SAFETY. BE SURE TO FOLLOW THEM.

NOTICE: A data plate with the model number and serial numbers of your unit is located on the frame, under the seat. Record these numbers in the spaces provided on the back cover of this guide.

### **BEFORE YOU CALL SERVICE**

Check Spark Plug Wire

- Firmly attached?
- Wire terminal clean?

Check Crankcase Oil Level

Overfilled/underfilled?

Check Fuel Tank

- Fuel in tank?
- Fuel dirty or stale?
- If tank has been empty for a long period, fill tank completely.

Check Air Cleaner

- Clean?
- Choke plate stuck?
- Governor spring free to move?

Check Under Blade Housing (Disconnect Spark Plug First)

· Blade obstructed or bent?

**Check Starting Instructions** 

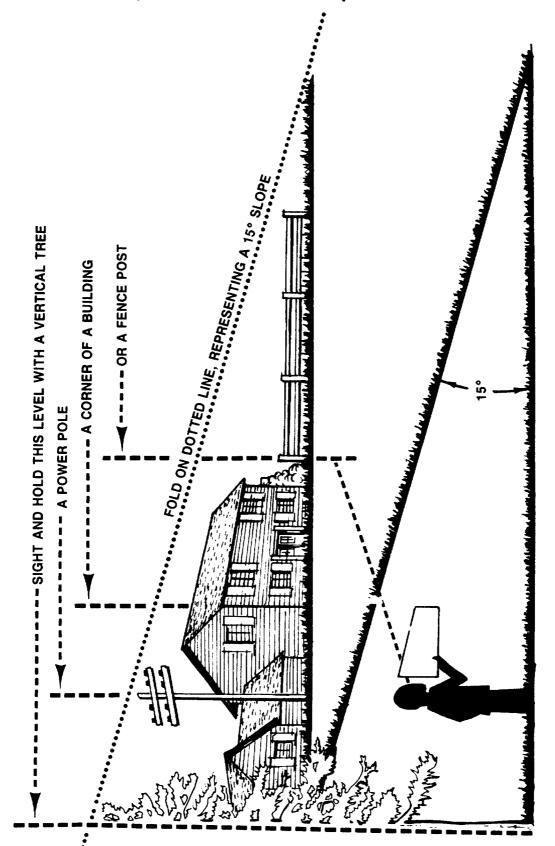
Read instruction manuals and labels for specific instructions.

**WARNING:** This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester muffler is available at your nearest engine authorized service center.

# **SLOPE GAUGE**

(Keep this sheet in a safe place for future reference.)





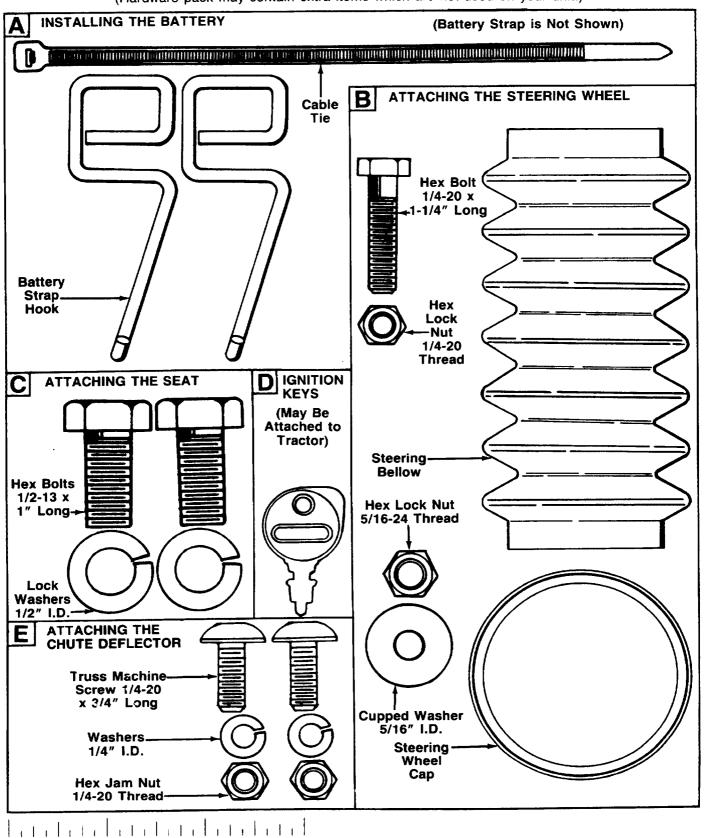
riding mower could overturn and cause serious injury. If operating a walk-behind mower on such a slope, it Do not mow on inclines with a slope in excess of 15 degrees (a rise of approximately 21/2 feet every 10 feet). extremely difficult to maintain your footing and you could slip, resulting in serious injury

Operate WALK-BEHIND mowers across the face of slopes, never up and down slopes. Operate RIDING mowers up and down slopes, never across the face of slopes.

### **CONTENTS OF HARDWARE PACK**

Remove this sheet from your owner's manual and lay the hardware on the illustration for identification purposes. Refer to the separate deck manual for any assembly instructions concerning the deck. After assembly, keep the Slope Gauge which is on the reverse side of this sheet for future use.

(Hardware pack may contain extra items which are not used on your unit.)



-Cut Along This Line-

4

INCHES

# **IMPORTANT**

#### **RULES FOR SAFE OPERATION**



THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED, COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR UNIT. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY. WHEN YOU SEE THIS SYMBOL— HEED ITS WARNING.





Your unit was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. If you violate any of these rules, you may cause serious injury to yourself or others.

- READ THIS OWNER'S MANUAL carefully in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
- This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.
- 3. Know the controls and how to stop the machine quickly.
- 4. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
- Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts to avoid entanglement in the moving parts. Never operate a unit in bare feet, sandals, or sneakers.
- To prevent injury, do not carry passengers or give rides. Keep children, pets and bystanders out of the area while mowing. Only the operator should ride on the unit and only ride in the seat.
- 7. Check overhead clearance carefully before driving under power lines, guy wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other situation where the operator may be struck or pulled from the unit, which could result in serious injury.
- 8. To maintain control of the unit and reduce the possibility of upset or collision, operate the tractor smoothly. Avoid erratic operation and excessive speed.
- 9. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidently thrown by the mower in any direction and cause injury to you or a bystander.
- Stop the blade(s) when crossing gravel drives, walks or roads.
- 11. Disengage all attachment clutches and shift into neutral before attempting to start engine.
- Disengage power to attachment(s) and stop engine before leaving operating position.
- Do not put hands or feet near or under rotating parts.
   Keep clear of the discharge opening at all times as the rotating blade(s) can cause injury.
- 14. Disengage power to attachment(s) and stop engine before making any repairs or adjustments. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.

- 15. Before attempting to unclog the mower or discharge chute, stop the engine. The mower blade(s) may continue to rotate for a few seconds after the engine is shut off. Therefore, be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
- Disengage power to attachment(s) when transporting or not in use.
- Take all possible precautions when leaving vehicle unattended such as disengaging power take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
- 18. For your safety, use the slope gauge included as part of this manual to measure slopes before operating this unit on a sloped or hilly area. If the slope is greater than 15° as shown on the slope gauge, do not operate this unit on that area or serious injury could result.
- 19. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face. Use extreme caution if it is necessary to drive the tractor up an incline or back the tractor down an incline because the front of the tractor could lift and rapidly flip over backward which could cause serious injury.
- Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Always keep the tractor in gear when going down steep hills to take advantage of engine braking action.
- Stay alert for holes in terrain and other hidden hazards which may cause the unit to tip over.
- Use care when pulling loads or using heavy equipment.
   Use only approved drawbar hitch points.
  - B. Limit loads to those you can safely control.
  - C. Do not turn sharply. Use care when backing.
  - D. Use counterweight(s) or wheel weights when suggested in owner's manual.
- 23. Watch out for traffic when crossing or near roadways.
- When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
- 25. Handle gasoline with care. It is highly flammable.
  - A. Use approved gasoline container.
  - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
  - Open doors if engine is run in garage. Exhaust fumes are dangerous. Do not run engine indoors.

### **Rules for Safe Operation (continued)**

- Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in operator's manual.
- Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- 28. Never store the machine with fuel in the fuel tank inside a building where ignition sources are present, such as hot water and space heaters, clothes dryers, and the like. Allow the engine to cool before storing in any enclosure.
- 29. To reduce fire hazard, keep engine free of grass, leaves or excessive grease.
- 30. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
- 31. Do not change the engine governor settings or overspeed the engine.
- 32. When using the vehicle with mower, proceed as follows:
  - (1) Mow only in daylight or in good artificial light.

- (2) Never make a cutting height adjustment while engine is running if operator must dismount to do so.
- (3) Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
- (4) Check blade mounting bolts for proper tightness at frequent intervals.
- 33. Check grass catcher bags frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.
- 34. Look behind to make sure the area is clear before placing the transmission in reverse and continue looking behind while backing up. Disengage blades before shifting into reverse and backing up.
- 35. This unit should not be driven up a ramp onto a trailer or truck under power, because the unit could tip over, causing serious personal injury. The unit must be pushed manually to load properly.

IMPORTANT: This unit is shipped WITHOUT GASOLINE or OIL; however, a small amount of oil may be present from the factory. Do not overfill. After assembly, service engine with gasoline and oil as instructed in the separate engine manual packed with your unit.

NOTE: Reference to right or left hand side of the unit is observed from the driver's seat, facing forward.

### **ASSEMBLY**

#### **UNPACKING**

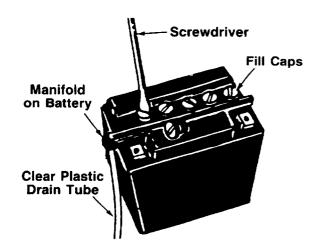
- Remove the lawn tractor from the carton as follows.
   Open the top flaps. Remove all loose parts and carton inserts. Cut the front corners of the carton.
   Make certain brake is released, and push the unit out of the carton.
- Remove page four from this manual and lay the contents of the hardware pack on the illustration for identification.

#### **BATTERY INFORMATION**



- A. Battery acid must be handled with great care as contact with it can burn and blister the skin. It is also advisable to wear protective clothing (goggles, rubber gloves and apron) when working with it.\*
- B. Should battery acid accidentally splatter into the eyes or onto the face, rinse the affected area immediately with clean cold water. If there is any further discomfort, seek prompt medical attention.

- C. If acid spills on clothing, first dilute it with clean water, then neutralize with a solution of ammonia/ water or baking soda/water.
- D. Since battery acid is corrosive, do not pour it into any sink or drain. Before discarding empty electrolyte containers, rinse them with a neutralizing solution.
- E. NEVER connect or disconnect charger clips to battery while charger is turned on as it can cause sparks.
- F. Keep all lighted materials (cigarettes, matches, lighters) away from the battery as the hydrogen gas generated during charging can be combustible.
- G. As a further precaution, only charge the battery in a well-ventilated area.
  - \*Always shield eyes, protect skin and clothing when working near batteries.



#### FIGURE 1.

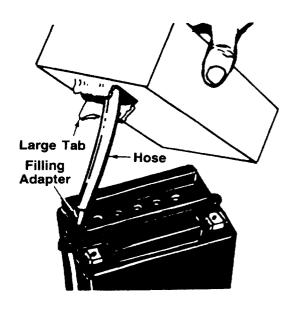


FIGURE 2.



Battery contains sulfuric acid. Refer to warning on page 6. Antidote: EXTERNAL—Flush with water. INTERNAL—Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Seek prompt medical attention. EYES: Flush with cool water for at least 15 minutes, then seek immediate medical attention.

Since batteries produce explosive gases, keep all lighted materials (cigarettes, lighters, matches, etc.) away. Be sure to charge battery only in well-ventilated areas.

KEEP BATTERIES
OUT OF THE REACH OF CHILDREN!

#### **ACTIVATING AND INSTALLING THE BATTERY**

1. Upon opening the battery pack, you should receive acid pack, battery, drain tube, filling adapter and hardware.



BATTERIES CONTAIN SULFURIC ACID AND MAY CONTAIN EXPLOSIVE GASES (when electrolyte has been added).

- 2. Place the battery on table or workbench to be filled.
- Place one end of clear plastic drain tube on manifold of battery. See figure 1.



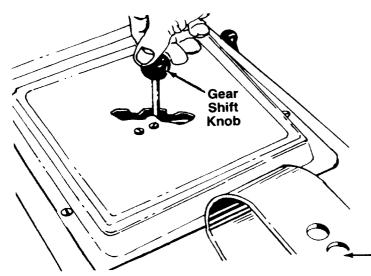
Some batteries may already have the drain tube installed, in which case it may be necessary to snip off the sealed end.

- 4. Remove the six fill caps from the top of the battery with a screwdriver. Care should be taken not to damage the fill caps. See figure 1.
- Lay acid package down, with "push in" facing up.
  Using thumb, push in small perforated tab at dot
  on front of package. Tear down large tab to solid
  line, exposing hose. Do not use any sharp object
  to open acid package.
- Pull out hose from package and hold upright. Squeeze hose forcing all acid back into package. Cut off tip of hose and insert filling adapter. See—figure 2.
- 7. Fill each cell to upper level marked on front of battery. Replace fill caps on battery. See figure 2.
- Allow battery to sit for 20 to 30 minutes. Add additional acid, if necessary, to bring it up to the proper level.
- 9. The battery can be charged after the 20 minutes sitting period. SLOW CHARGE THE BATTERY (DO NOT FAST CHARGE) at a maximum bench rate of 1.4 amperes until the specific gravity reading is 1.260-1.280. Charge for a minimum of 2 hours and a maximum of 8 hours.



Charging rate after battery has been put into operation: The battery is to be charged for a period of 14-16 hours. NO LONGER THAN 30 HOURS.

After battery has been in service, add only distilled water. Do not add acid.



### NOTE

This engine is equipped with an alternator. The current for the battery charger alternator is unregulated. During normal operation, it is only necessary to charge the battery:

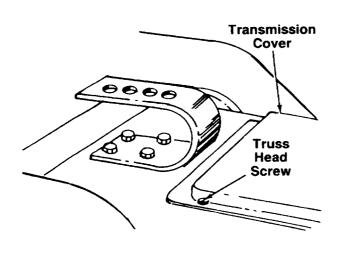
- 1. When it is activated for the first time.
- 2. Before winter storage.
- 3. Before using the lawn tractor after winter storage.

#### **INSTALLING THE BATTERY (Hardware A)**

1. Place gear shift lever in the "neutral" position.

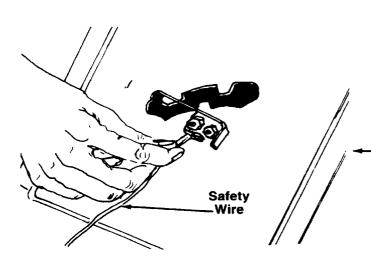
—Unscrew the gear shift knob. See figure 3.

FIGURE 3.



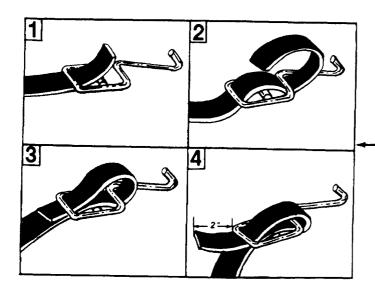
2. Remove the two truss head screws which secure—the transmission cover. See figure 4.

FIGURE 4.



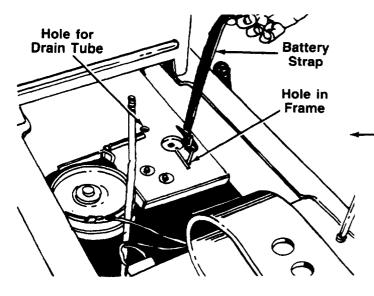
 Lift the transmission cover. Unplug the safety wire from beneath the transmission cover. See figure
 Remove transmission cover.

FIGURE 5.



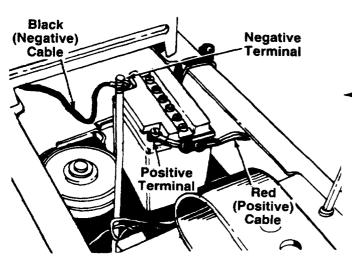
4. Assemble one battery strap hook to each end of the battery strap as shown in figure 6. Adjust the strap so there is about 2" of strap beyond the hooks.

FIGURE 6.



 Hook one end of the battery strap into the hole provided in the frame. See figure 7. Lay the strap over the side of the frame.

#### FIGURE 7.



- 6. Set the battery in the lawn tractor so that the negative terminal is toward the front of the unit. See figure 8. Place the end of the drain tube into the line in the frame shown in figure 7.
- Slide the square nut (provided with battery hardware) into the positive (+) terminal. Place the positive (heavy red wire) cable on the positive terminal. Secure with screw provided. See figure 8.
- 8. Slide the square nut (provided with battery hardware) into the negative (-) terminal. Place the negative (heavy black wire) cable on the negative terminal. Secure with screw provided.

FIGURE 8.

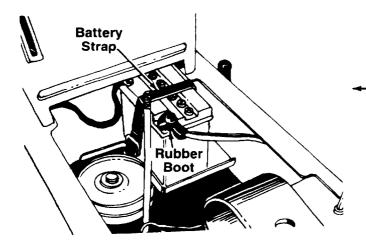


FIGURE 9.

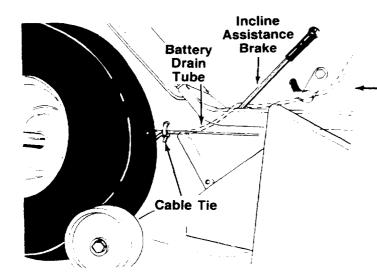


FIGURE 10.

- Slide the battery forward into position as shown in figure 9. Secure in place with the battery strap, stretching strap over the battery and hooking into hole in the frame.
- 10. Slide rubber boot over the positive terminal. See figure 9.

Bend the positive cable down, out of the way, to allow clearance for the gear shift lever and safety switch (underneath the transmission cover).



Make certain the positive cable does not contact the safety switch when the transmission cover is reassembled, to avoid damage to the unit and serious personal injury.

- 11. Route the battery drain tube toward the back of the unit, over the shaft on the incline assistance brakeand inside the deck links. See figure 10.
- Secure drain tube to hole in the side of frame with cable tie as shown in figure 10. Trim excess end of cable tie. Be certain tube is routed away from wheel rim.
- Plug the safety wire into the switch beneath the transmission cover. Refer to figure 5. Replace the transmission cover and gear shift knob.

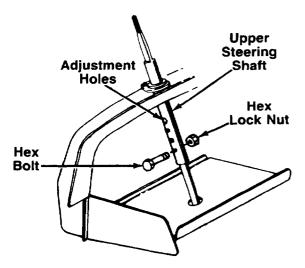
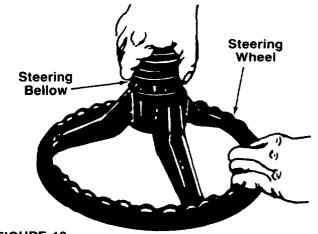


FIGURE 11.

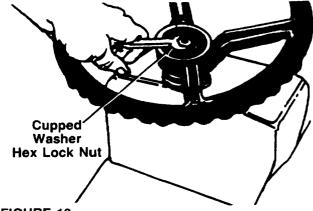
#### ATTACHING THE STEERING WHEEL (Hardware B)

 Insert large end of the upper steering shaft through the hole in the dash panel, over the lower steering —shaft. See figure 11. The four holes in the upper steering shaft provide four steering wheel heights. Select desired hole, and secure with hex bolt and hex lock nut.



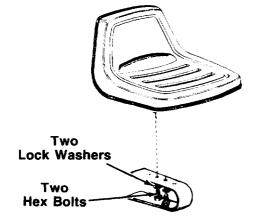
2. Attach one end of steering bellow to the steering ——wheel as shown in figure 12.

#### FIGURE 12.



- 3. Position the front wheels of the tractor so they are pointing straight forward.
- 4. Place the steering wheel and steering bellow over the steering shaft, positioning steering wheel as desired.
- 5. Place the washer with the cupped side down over the steering shaft. Secure with 5/16" hex lock nut.—See figure 13.
- 6. Place the steering wheel cap over the center of the steering wheel and seat it with your hand.

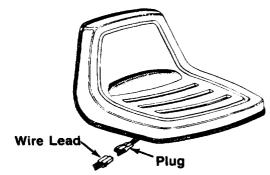
#### FIGURE 13.



#### **ATTACHING THE SEAT (Hardware C)**

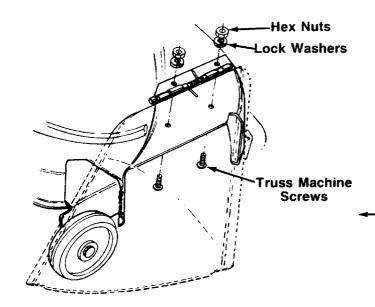
The seat may be adjusted to three different positions. Select desired position and secure to seat spring with two hex bolts and lock washers. See figure 14.

#### FIGURE 14.



 Plug the wire lead which is in the wire harness beneath the seat into the plug on the wire lead extending from the right hand side of the seat. See —figure 15.

FIGURE 15.



## ATTACHING THE CHUTE DEFLECTOR (Hardware E)



Do not operate your unit unless the chute deflector has been properly installed.

Place the chute deflector in position on the deck. Secure with truss machine screws, lock washers and —hex nuts. See figure 16.

FIGURE 16.

### **CONTROLS**

#### THROTTLE CONTROL

The throttle control is used to regulate the engine speed. To get maximum efficiency from cutting, the throttle should be in the FAST position when operating the mower. See figure 17.

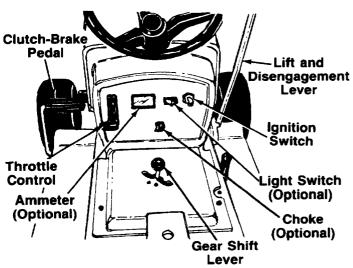


FIGURE 17A.—Model TMO-33920A

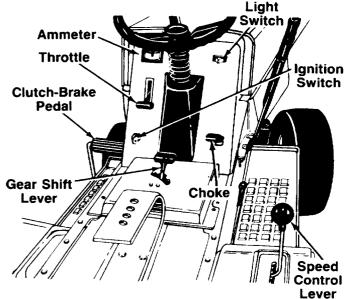


FIGURE 17B.—Model TMO-33921A

#### CHOKE CONTROL

The choke control is located on the dashboard and is operated manually. Details for the choke operation are covered in the separate engine manual packed with your unit. See figure 17.

#### **GEAR SHIFT LEVER**

The shift lever is located on the left side of the console and has three positions, FORWARD, NEUTRAL and REVERSE. See figure 17. The clutch-brake pedal must be depressed and the lawn tractor must not be moving when shifting gears. Do not force the shift lever.

Release the clutch-brake pedal slightly to line up the shifting collar in the transmission. Then try to shift gears.

#### SPEED CONTROL LEVER

The speed control lever allows you to regulate the ground speed of the lawn tractor. See figure 18. To select the ground speed, depress clutch pedal. Push speed control lever outward and move backward to slow lawn tractor, move forward to increase speed. When desired speed has been obtained, release lever in that position. Whenever clutch is engaged, unit will automatically go to the pre-set speed.

#### **IGNITION SWITCH**

Turn the key to the START position to start the engine. When the engine is running, let the key return to the ON position. To stop the engine, turn the key to the left to the OFF position and remove it to prevent accidental starting. See figure 17.

#### LIGHT SWITCH

Push the light switch to turn on the lights. The lights will only operate when the engine is running. See figure 17.

#### **AMMETER**

The ammeter registers the rate of battery charge or discharge. The ammeter will register on the discharging side when starting the engine. It should register on the opposite side (charging) when the engine is running in the fast position until the battery is completely charged. With a fully charged battery or with the engine idling, the ammeter will not show a charge. See figure 17.

#### **CLUTCH-BRAKE PEDAL**

The clutch-brake pedal is located on the left side of the lawn tractor. Depressing the clutch-brake pedal part way disengages the clutch. Pressing the pedal all the way down disengages the clutch and engages the disc brake. See figure 17.



The clutch-brake pedal must be depressed to start the engine.

#### **PARKING BRAKE**

The speed control lever is used to set the parking brake. To set the parking brake, depress the clutch-brake pedal. Press the speed control lever outward and all the way to the rear of the unit. Release the speed control lever and the clutch-brake pedal.

To release the parking brake, depress the clutch-brake pedal, press the speed control lever outward and move to desired position. Release the speed control lever and the clutch-brake pedal.

#### **INCLINE ASSISTANCE BRAKE**

When stopping on a hill, hold the incline assistance brake lever back while you release the clutch-brake pedal until the lawn tractor begins to move, then release the lever. This lever permits smoother starts and clutch engagement by holding the tractor during the brake release/clutch engagement operation. See figure 18.

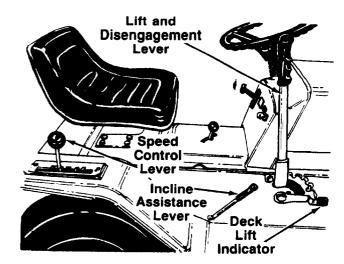
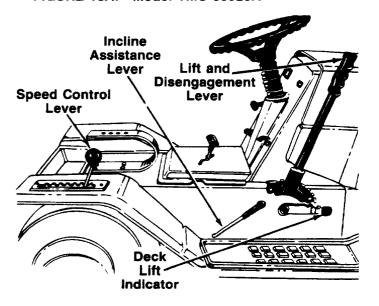


FIGURE 18A.-Model TMO-33920A



#### FIGURE 18B.—TMO-33921A

#### **INTERLOCKS (Not Shown)**

Interlock safety switches are located on the clutchbrake pedal, the lift and disengagement lever, the gear shift lever and under the seat.

Before the engine will start, the clutch-brake pedal must be depressed all the way and the lift and disengagement lever must be in the disengaged position.

Before the unit can be shifted into reverse or if the operator leaves the seat, the lift and disengagement lever must be in the disengaged position.

#### **CUTTING CONTROLS**

#### A. LIFT AND DISENGAGEMENT LEVER

The lift and disengagement lever is used to raise and lower the cutting deck. Pulling it all the way back and locking it disengages the blades. The lift and disengagement lever **must** be in the disengaged position when starting the engine, when shifting into reverse or if the operator leaves the seat. See figure 18.

#### **B. DECK LIFT INDICATOR**

The deck lift indicator marks the position being used for the lift lever. Select the lift lever position desired, press the indicator lever outward, move it to the position immediately below the lift lever and release the indicator lever. See figure 18.

#### C. DECK WHEEL HEIGHT ADJUSTMENT

Move the deck wheel to the desired hole location in the deck.

#### D. SETTING THE CUTTING HEIGHT

Move the deck wheel to the desired hole location in the deck.

- Select the position for the lift lever which gives the desired cutting height. Move the deck lift indicator so that the lift lever can be returned to the same position after it is raised.
- Set the deck wheels so that the wheels are ¼ to
   inch above the ground.

### **OPERATION**

### CAUTION

- · READ OPERATOR'S MANUAL(S) · NEVER CARRY CHILDREN
- . KNOW LOCATION AND FUNCTION OF ALL CONTROLS
- KEEP SAFETY DEVICES (GUARDS, SHIELDS AND SWITCHES)
   IN PLACE AND WORKING
- . REMOVE OBJECTS THAT COULD BE THROWN BY BLADE(S)
- DO NOT OPERATE THE UNIT WHEN CHILDREN AND OTHERS ARE AROUND
- ALWAYS LOOK BEHIND THE UNIT BEFORE BACKING UP
- . DO NOT OPERATE THE UNIT WHERE IT COULD SLIP OR TIP
- IF THE UNIT STOPS GOING UPHILL. STOP BLADE(S) AND BACK SLOWLY DOWNHILL
- BE SURE BLADE(S) AND ENGINE ARE STOPPED BEFORE PLAC-ING HANDS OR FEET NEAR BLADE(S)
- BEFORE LEAVING OPERATOR'S POSITION. SHUT ENGINE OFF AND REMOVE KEY

#### TIRE PRESSURE

For shipping purposes, the tires on your unit may be over-inflated. Tire pressure should be reduced before unit is put into operation. Recommended operating tire pressure should be 10 p.s.i.

Check sidewall of tire for manufacturer's maximum tire pressure. If this information does not appear on

your tire, maximum tire pressure under any circumstances is 30 p.s.i. Equal tire pressure should be maintained on all tires.

#### STARTING THE ENGINE



To open the hood, simply lift up on both sides of the hood.

- 1. Service the engine with oil and gasoline as described in the engine manual.
- 2. Depress the clutch-brake pedal and set the parking brake.
- 3. Place the lift and disengagement lever in the DISENGAGED position. See figure 18.



This unit is equipped with a safety interlock system for your protection. The purpose of the safety interlock system is to prevent the engine from cranking or starting unless the clutch-brake pedal is depressed and the lift and disengagement lever is in the disengaged position. In addition, the lift and disengagement lever must be in the disengaged position when the unit is put into reverse or the engine will shut off. If the operator leaves the seat with the lift and disengagement lever engaged, the engine will shut off.



Do not operate the lawn tractor if the interlock system is malfunctioning because it is a safety device, designed for protection.

- 4. Set the throttle control in the FAST position. See figure 17.
- 5. Pull out choke knob to choke engine.



A warm engine may not require choking.

- Turn the ignition key to the START position. When the engine is running, let the key return to the ON position. See figure 17.
- 7. Push choke knob in gradually. Move the throttle control to desired engine speed.

#### STOPPING THE ENGINE

Turn the ignition key to the left to the OFF position. Remove the key to prevent accidental starting.



A brief break-in period is essential to ensure maximum engine and mower life. The break-in consists of running the engine at half speed for a period of time required to use one tank of gasoline. It is also recommended to change crankcase oil after the first 5 hours of operation.

Be sure that the lawn is clear of stones, sticks, wire, or other objects which could damage lawn tractor or engine. For best results and to insure more even grass distribution, do not mow when lawn is excessively wet.



If you strike a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the unit for any damage, and repair the damage before restarting and operating the mower.



If any problems are encountered, refer to the Trouble Shooting Chart on page 23.

#### **OPERATING THE LAWN TRACTOR**

- 1. Set the desired cutting height.
- 2. Start the engine as instructed in previous column.
- 3. Move throttle control to 34 or full throttle to prevent strain on the engine and to operate the cutting blades.
- 4. Place the shift lever in either the FORWARD or REVERSE position.



Look to the rear before backing up.

Release the parking brake by depressing the clutch-brake pedal, pressing outward on the speed control lever and moving to desired position.



Use first speed position when operating the lawn tractor for the first time.

- Release clutch-brake pedal slowly to put unit into motion.
- 7. The lawn tractor is brought to a stop by depressing the clutch-brake pedal.



If the unit is not to be used for a long period, place the gear shift lever in NEUTRAL, stop the engine, set the parking brake and remove the key. DO NOT leave the machine on an incline.

If unit stalls with speed control in high speed, or if unit will not operate with speed control lever in a low speed position, proceed as follows.

- 1. Place shift lever in NEUTRAL.
- 2. Restart engine.
- 3. Place speed control lever in high speed position.
- 4. Release clutch-brake pedal fully.
- 5. Depress clutch-brake pedal.
- 6. Place speed control lever in desired position.
- Place shift lever in either FORWARD or REVERSE, and follow normal operating procedures.

#### **OPERATING THE CUTTING BLADES**

The cutting blades may be engaged while the lawn tractor is moving or standing still. DO NOT engage the cutting blades abruptly as the sudden belt tension on the pulley may cause the engine to stall.



When the blade drive is engaged, keep feet and hands away from the discharge opening, the blades or any part of the deck.

Move the lift and disengagement lever into the DISENGAGED position to raise the deck and disengage the blades.



When the machine is used for other than mowing operations, the blade drive should be disengaged.

GRASS CATCHER Model 190-064 is available as optional equipment for the lawn tractors shown in this manual.



The mower should not be operated without the entire grass catcher or chute deflector in place.



Under normal usage bag material is subject to wear, and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bag.

### **ADJUSTMENTS**

#### SEAT ADJUSTMENT

FIGURE 19.

The seat may be adjusted to one of three positions. Refer to seat installation section of assembly instructions.

#### STEERING WHEEL ADJUSTMENT

There are four height positions for the steering wheel. To adjust the height of the steering wheel, remove the hex bolt and hex lock nut on the steering shaft. Place the steering wheel in the position desired and secure with hex bolt and hex lock nut. Refer to figure 11.



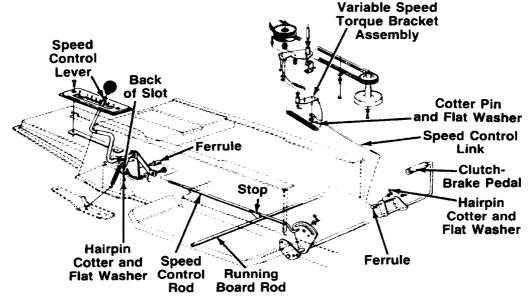
When raising the height of the steering wheel, stretch the steering bellow to cover the steering shaft.

#### SPEED CONTROL ADJUSTMENT (See figure 19)

First, adjust the speed control lever by pushing the clutch-brake pedal forward until the stop on the speed control rod is against the running board rod. See figure 19. Have another person hold the pedal in this position as you make the following adjustment. Place the speed control lever in parking brake position. Remove the hairpin cotter and flat washer, and adjust the ferrule on the rod so it is against the back end of the slot. See figure 19. Replace the flat washer and hairpin cotter.

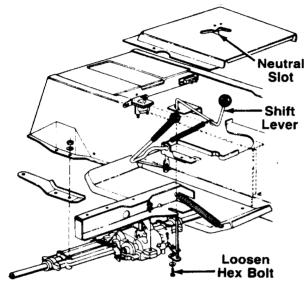
Next, adjust the speed control link as follows to obtain the correct neutral adjustment.

- 1. Start the engine.
- 2. Place the shift lever in Neutral position.
- 3. Place the speed control lever in high speed position.
- 4. Release the clutch-brake pedal completely, then slowly depress the pedal all the way (to park position). Hold the pedal in this position.
- 5. Turn the engine off.
- 6. After engine stops completely, release the clutchbrake pedal.
- 7. Place speed control lever in second position.
- 8. Remove the cotter pin and flat washer which secures the speed control link to the variable speed torque bracket assembly.
- Push the clutch-brake pedal backward by hand as far as it will go using light pressure. Hold it in this position as you thread the speed control link in or out of the ferrule until it lines up with the pin on the variable speed torque bracket assembly.
- 10. Secure speed control link to variable speed torque bracket assembly with flat washer and cotter pin.



#### **NEUTRAL ADJUSTMENT**

- Place the transmission in neutral. (The unit will move freely when pushed forward and backward with the parking brake released.)
- 2. Loosen the bolt which secures the shift lever assembly to the shift lever link. See figure 20.
- 3. Place the shift lever in the netural slot. See figure 20.
- 4. Tighten the bolt to 13 foot pounds.



#### FIGURE 20.

#### WHEEL ADJUSTMENT

The caster (forward slant of the king pin) and the camber (tilt of the wheels out at the top) require no adjustment. Automotive steering principles have been used to determine the caster and camber on the tractor. The front wheels should toe-in 1/8 inch.

To adjust the toe-in, follow these steps.

- Remove the hex nut and lock washer, and drop the tie rod end from the wheel bracket. See figure 21.
- 2. Loosen the hex jam nut on tie rod.
- 3. Adjust the tie rod assembly for correct toe-in.

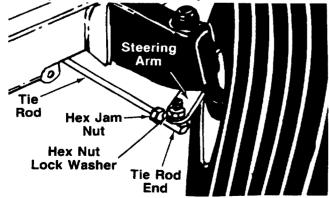


FIGURE 21.

Dimension "B" should be approximately 1/8" less than Dimension "A." See figure 22.

- A.) To increase Dimension "B," screw tie rod into tie rod end.
- B.) To decrease Dimension "B," unscrew tie rod from tie rod end.
- C.) Reassemble tie rod. Check dimensions. Readjust if necessary.

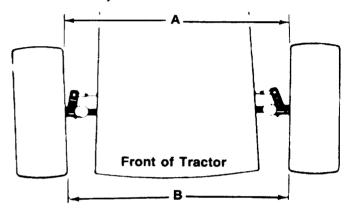


FIGURE 22. TOE-IN DIAGRAM

#### CARBURETOR ADJUSTMENT



If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches and blades. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Minor carburetor adjustment may be required to compensate for differences in fuel, temperature, altitude and load. To adjust the carburetor, refer to the separate engine manual packed with your unit.



A dirty air cleaner will cause an engine to run rough. Be certain air cleaner is clean and attached to the carburetor before adjusting carburetor. Refer to the separate engine manual.

#### **BRAKE ADJUSTMENT (See figure 23)**

The brake is located by the right rear wheel inside the frame. During normal operation of this machine, the brake is subject to wear and will require periodic examination and adjustment.



Do not have the engine running when you adjust the brake.

To adjust the brake, remove the cotter pin. Adjust the castle nut so the brake starts to engage when the brake lever is 1/4" to 5/16" away from the axle housing.



Figure 23 is shown with the unit tipped up on rear wheels for clarity only.

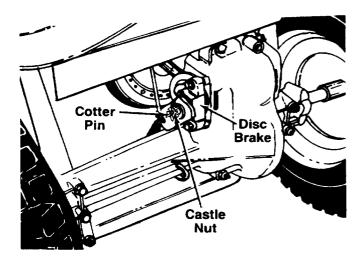


FIGURE 23.

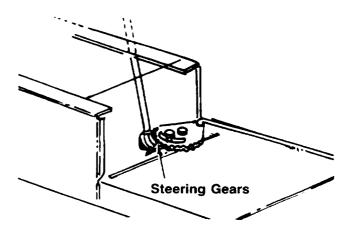
### LUBRICATION



Always stop engine and disconnect spark plug wire before cleaning, lubricating or doing any kind of work on lawn tractor.

#### **STEERING GEARS**

Lubricate teeth of steering gears with automotive multipurpose grease after every 25 hours of operation or once a season. See figure 24.



#### FIGURE 24.

#### STEERING SHAFT

Lubricate steering shaft at least once a season with light oil.

#### **TRANSAXLE**

The transaxle is lubricated and sealed at the factory and does not require checking. If disassembled for any reason, lubricate with 10 oz. of grease, part number 737-0148.

#### **FRONT WHEELS**

The front wheels are provided with grease fittings. Lubricate at least once a season with automotive multipurpose grease.

#### **PIVOT POINTS**

Lubricate all pivot points with light oil at least once a season.

### **MAINTENANCE**



Disconnect the spark plug wire and ground against the engine before performing any repairs or maintenance.

#### **TROUBLE SHOOTING**

Refer to page 23 of this manual for trouble shooting information.

#### **CRANKCASE OIL**

Check the oil level in the crankcase before each use of the machine and after every five hours of operation. Oil level should be maintained as instructed in the separate engine manual.

After the first five hours of operating a new engine, drain the oil from the crankcase while engine is still hot and refill crankcase with new oil; thereafter change the oil every 25 hours of operation. Refer to the engine manual.

#### AIR CLEANER

Under normal operating conditions, the air cleaner, located on top of the carburetor, must be serviced after every ten hours of use. Under extremely dusty operating conditions, the air cleaner must be serviced after every hour of operation. To service the air cleaner, refer to the separate engine manual packed with your unit.

#### **CLEANING ENGINE AND BLADE HOUSING**

Any fuel or oil spilled on the machine should be wiped off promptly. Grass, leaves, and other dirt must not be left to accumulate around the cooling fins of the engine or on any part of the machine.

Clean the underside of the blade housing after each mowing.

#### **SPARK PLUG**

The spark plug should be cleaned and the gap reset once a season. Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type and gap specification.

#### **CUTTING BLADE**

#### A. Removal for Sharpening or Replacement



Be sure to disconnect and ground the spark plug wire and remove ignition key before working on the cutting blade to prevent accidental engine starting. Protect hands by using heavy gloves or a rag to grasp the cutting blades.

- 1. Remove the large bolt and lock washer which holds the blade and adapter to the blade spindle.
- 2. Remove the blade and adapter from the spindle. Be careful not to lose the key on the spindle.
- 3. If the blade or blade adapter needs replacing, remove the two small bolts, lock washers and nuts which hold the blade to the adapter.

#### B. Sharpening

Remove the cutting blade by following the directions of the preceding section.

When sharpening the blade, follow the original angle of grind as a guide. It is **extremely important** that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds, may cause damage to the mower and could break, causing personal injury.

The blade can be tested for balance by balancing it on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly.



It is recommended that the blade always be removed from the adapter for the best test of balance.

#### C. Reassembly

Before reassembling the blade and the blade adapter to the unit, lubricate the spindle and the inner surface of the blade adapter with light oil. Lubricating the bolt holes, bolts and inner surface of the nuts with light oil is also recommended. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.

When replacing the blade, be sure to install the blade with the side of the blade marked "Bottom" (or with part number) facing the ground when the mower is in the operating position. Make certain key is in place on the crankshaft.

#### **Blade Mounting Torque**

3/8" Dia. Bolt 375 in. lb. min., 450 in. lb. max. 5/16" Dia. Bolt 150 in. lb. min., 250 in. lb. max.

To insure safe operation of your unit, ALL nuts and bolts must be checked periodically for correct tightness.

#### **FUEL FILTER**

Your unit is equipped with a replaceable in-line fuel filter. Replace filter whenever contamination or discoloration is noticed. Order replacement filter through your engine authorized service dealer.

#### DRIVE BELT REMOVAL AND REPLACEMENT



Disconnect the spark plug wire and ground it against the engine. Block the wheels of the unit.



Figures 25 and 28 through 30 are shown with the unit tipped up for clarity. It is not necessary to tip the unit to remove the belts.

However, if tipping the unit is desired, remove the battery from the unit. To prevent gasoline leakage, drain the gasoline, or remove the fuel tank cap, place a thin piece of plastic over the neck of the fuel tank and screw on the cap. Be certain to remove the plastic when finished changing the belts. Block unit securely.

#### Removing the Deck Belt

- 1. Place the lift lever in the disengaged position.
- 2. Remove the three hex bolts (belt keepers) from the engine pulley belt guard. See figure 25.

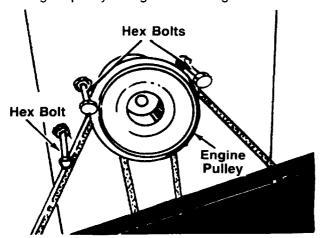


FIGURE 25.



Make certain hex bolts are reassembled as shown in figure 25.

- 3. Unhook the deck belt from the engine pulley.
- Place the lift lever in the engaged (all the way forward) position.
- Disconnect the six deck links by removing the hairpin cotters and flat washers.
- 6. Place the lift lever in the disengaged position.
- 7. Slide the deck from beneath the lawn tractor.
- Remove the belt guards at each deck pulley by removing the hex bolts, lock washers and hex nuts. See figure 26.
- Remove and replace the belt, following the instructions in reverse order.

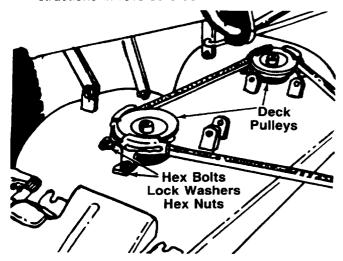


FIGURE 26.

#### Removing the Rear Drive Belt

- 1. Remove the two truss head screws which secure the transmission cover. See figure 4.
- 2. Lift the transmission cover. Unplug the safety wire from beneath the transmission cover. Refer to figure 5. Remove transmission cover.
- 3. Push the idler pulley toward the right side of the unit. Lift the belt over the idler pulley. See figure 27.
- 4. Remove the belt from the variable speed pulley.
- Remove the two bolts which hold the shift lever bracket to the frame on the left side of the unit.
   Swing the bracket toward the right so the belt can be removed from the transmission pulley. See figure 27.
- 6. Replace belt, and reassemble in reverse order.

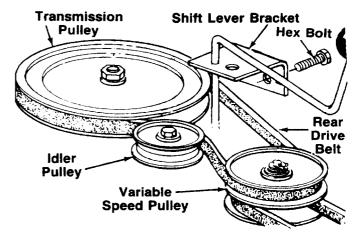


FIGURE 27.

#### Removing the Front Drive Belt

- To remove the front drive belt, first remove the rear drive belt from the idler pulley and variable speed pulley.
- 2. Place the lift lever in the disengaged position.
- 3. Remove the three hex bolts (belt keepers) from the engine pulley belt guard. See figure 25.



Make certain hex bolts are reassembled as shown in figure 25.

- 4. Unhook the deck belt from the engine pulley.
- 5. Remove the two bolts, lock washers and nuts on each side of the frame which hold the engine pulley belt guard to the frame. See figure 28.

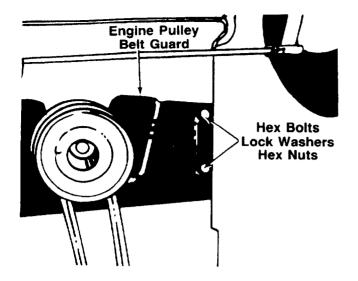


FIGURE 28.

6. Remove the engine pulley belt guard by slipping it back and to the right. See figure 29.

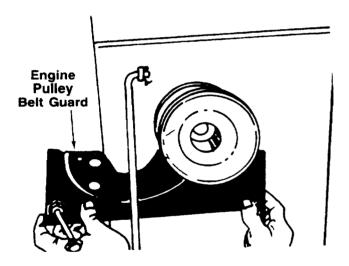


FIGURE 29.

- 7. Place the clutch-brake pedal in park position.
- 8. Push forward on the variable speed pulley, and lift the belt off the engine and remove the belt from the engine pulley.
- Release the clutch-brake pedal. Using the pedal to move the variable speed pulley as necessary, lift the belt up and off the variable speed pulley.



It may be helpful to remove the pins which act as belt keepers, shown in figure 30. When reassembling, make certain belt is inside the pins.

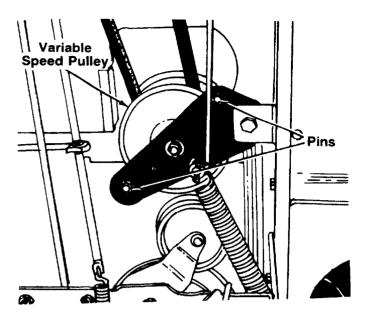


FIGURE 30.

 Reassemble with a new belt, following instructions in reverse order.

#### **BATTERY REMOVAL OR INSTALLATION**



When removing the battery, follow this order of disassembly to prevent the screwdriver from shorting against the frame.

- 1. Remove the Negative cable.
- 2. Remove the Positive cable.

To install a battery:

- 1. Attach the Positive cable.
- 2. Attach the Negative cable.

#### **JUMP STARTING**

- Attach the first jumper cable from the Positive terminal of the good battery to the Positive terminal of the dead battery.
- 2. Attach the second jumper cable from the Negative terminal of the good battery to the FRAME OF THE UNIT WITH THE DEAD BATTERY.



Failure to use this starting procedure could cause sparking, and the gas in either battery could explode.

#### **BATTERY MAINTENANCE**

- Check periodically (every two weeks or before and after charging) to be sure electrolyte level is above the lowest line on battery. Add only distilled water or a good quality drinking water. NEVER add additional acid or other chemicals to battery after initial activation.
- The battery should be checked with a hydrometer after every 25 hours of operation. If the specific gravity is less than 1.225, remove battery and recharge.
- 3. Coat the terminals and exposed wiring with a thin coat of grease or petroleum jelly for longer service and protection against electrolyte corrosion.
- 4. The battery should be kept clean. Any deposits of acid should be neutralized with soda and water. Be careful not to get this solution in the cells.

#### **BATTERY STORAGE**

- Charge battery using normal methods. NEVER store discharged battery as it will not recover.
- When storing battery for extended periods, disconnect battery cables. Removing battery from unit is recommended.
- 3. Store in cold, dry place.
- 4. Recharge battery whenever the specific gravity is less than 1.225, before returning to service, or every two months, whichever occurs first.

#### **COMMON CAUSES FOR BATTERY FAILURE ARE:**

- 1. Overcharging
- 2. Undercharging
- 3. Lack of water
- 4. Loose holds downs and/or corroded connections
- 5. Excessive loads
- 6. Battery electrolyte substitutes
- 7. Freezing of electrolyte



THESE FAILURES DO NOT CONSTITUTE WARRANTY.

#### INSTALLATION OF TIRE TO RIM



The tollowing procedure must be followed when removing or installing a tire to the rim.

- 1. Be sure rim is clean and rust free.
- 2. Lubricate both the tire and rim generously.
- Never inflate to over 30 p.s.i. to seat beads. Excessive inflation pressure when seating beads may cause tire/rim assembly to burst with force sufficient to cause serious injury.

### **OFF-SEASON STORAGE**

If the machine is to be inoperative for a period longer than 30 days, prepare for storage as follows.

- 1. Clean the engine and the entire unit thoroughly.
- 2. Lubricate all lubrication points. Wipe the entire machine with an oiled rag to protect the surfaces.
- Refer to the engine manual for correct engine storage instructions. The engine must be completely drained of fuel to prevent gum deposits from forming on essential carburetor parts, fuel lines and fuel tanks.
- 4. Refer to battery storage instructions on page 21.
- 5. Store unit in a clean, dry area.



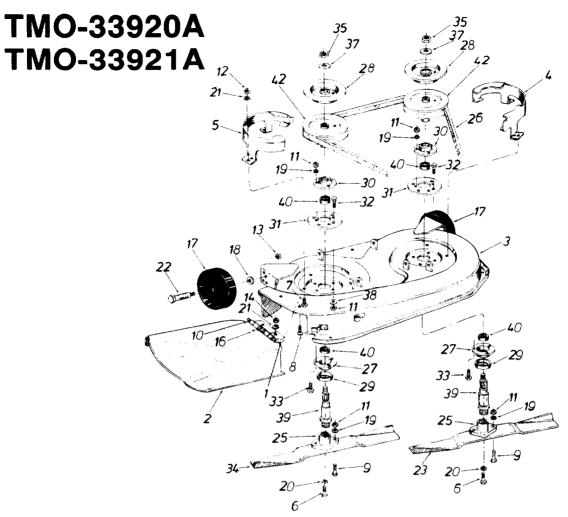
When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment, especially any chains, springs, bearings and cables.

### TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE										
Engine will not crank	Battery installed incor- rectly	The battery must be installed with the negative terminal, identified at the terminal post by (Neg, N or $-$ ), grounded. The positive terminal (Pos, P or $+$ ) attaches to the large cable from the solenoid. The small red wire from the fuse holder or circuit breaker is also attached to the positive terminal.								
'	Blown fuse or circuit breaker	Replace fuse with 7½ amp. fuse ¾ x 1¼" Ig. Circuit breaker will reset itself when it cools off. Fuses or circuit breakers seldom open or fail without a reason. The problem must be corrected. Check for loose connections in the fuse holder. Replace fuse holder if necessary. A dead short may be in the cranking or charging circuit where the insulation may have rubbed through and exposed the bare wire. Replace the wire or repair with electrician's tape if the wire strands have not been damaged. Note: Look for a wire pinched between body panels, burned by the exhaust pipe or muffler or rubbed against a moving part.								
	Battery is dead or weak	Use a hydrometer to check the condition of the battery. The Specific Gravity (s.g.) should be 1.265 at 80°F. (1.215 s.g. minimum needed for cranking engine). The reason for the battery failing must be determined. (1) Defective battery. Battery will not accept or hold a full charge. (2) Short circuit. Check for grounded wire. (3) Charging system not working.								
		The charging system is an alternator located under the flywheel. It is unregulated and rated 3 amp. at 3600 r.p.m. A diode (rectifier) is located in the output lead just before the wire harness plug on the engine side.								
		Red Shrink 3 AMP DC (Batt.)  To Alternator   Tube   Tube								
		Wire Polarized Plug								
		The diode changes A.C. to D.C. to charge the battery. A bad diode can either fail to charge the battery or discharge the battery if the alternator is shorted as well as the diode. To test: (1) Disconnect charger lead from the battery (small red wire). (2) Connect 12 V small test lamp between the 3 amp. D.C. charge lead and the positive terminal of the battery. (3) With the engine off, the lamp should not light. If it does, the diode and possibly the alternator should be replaced. (4) Start the engine. The lamp should light. If it does not, the alternator (stator) or lead wire is bad and should be replaced.								
	Mechanical failure (Wires and switches)	The interlock system includes two mechanical activated switches which are wired in series in the circuit used to energize the starter solenoid. While testing the interlock system, you will make the mower temporarily unsafe by permitting the engine to be started with the blade and clutch engaged. WARNING: While testing, disengage the clutch, shut off the blade control, set the parking brake and place the gear shift lever in neutral. Attach a wire (minimum 18 gauge) to the positive terminal of the battery and touch the other end to the small terminal on the solenoid. If the engine does not crank: (1) There is a loose connection or poor ground. (2) The solenoid may be bad. The solenoid can be checked by using a heavy wire (#8 gauge minimum) and jumping between the two large terminals. If the engine cranks, the solenoid is bad. (3) If the engine does not crank when you jump the solenoid, have the starter motor tested by an authorized engine dealer. If the engine does crank, the problem is with one of the safety switches, ignition switch or the wire between the fuse holder (or circuit breaker) and the small terminal on the solenoid. Note: Look for a poor connection at the switches or a defective switch. Replace if necessary.								
Engine cranks but will not start	Throttle or choke not in starting position	Check owner's guide for correct position for throttle control and choke for starting.								
	No spark to spark plug	Spark plug lead disconnected. Connect lead. Hold spark plug lead away from engine block about 1/8". Crank engine. There should be a spark. If not, have engine repaired at authorized engine service dealer.								
		Faulty spark plug. To test, remove spark plug. Attach spark plug lead to spark plug. Ground the spark plug body against the engine block. Crank the engine. The spark plug should fire at the electrode. Replace if it does not.								

### TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
	No fuel to the carburetor	Gasoline tank empty. Fill.  Fuel line or in-line fuel filter plugged. Remove and clean fuel line. Replace filter if necessary.
	Air filter dirty	If the air cleaner is dirty, the engine may not start. Clean or replace as recommended by the engine manufacturer.
Engine smokes	Engine loses crankcase vacuum	Dipstick not seated or broken. Replace defective part. Engine breather defective. Replace.
Excessive vibration	Bent or damaged blade spindle	Stop engine immediately. Check all pulleys, blade adapters, keys and bolts for tightness and damage. Tighten or replace any damaged parts.
	Bent blade	Stop engine immediately. Replace damaged blade. Only use original equipment blades.
Mower will not discharge grass or leaves uncut strips	Engine speed low Transmission selection Blades short or dull	Throttle must be set between 3/4 and full throttle. Use lower transmission speed. The slower your ground speed, the better the quality of cut. Sharpen or replace blades (uncut strip problem only).

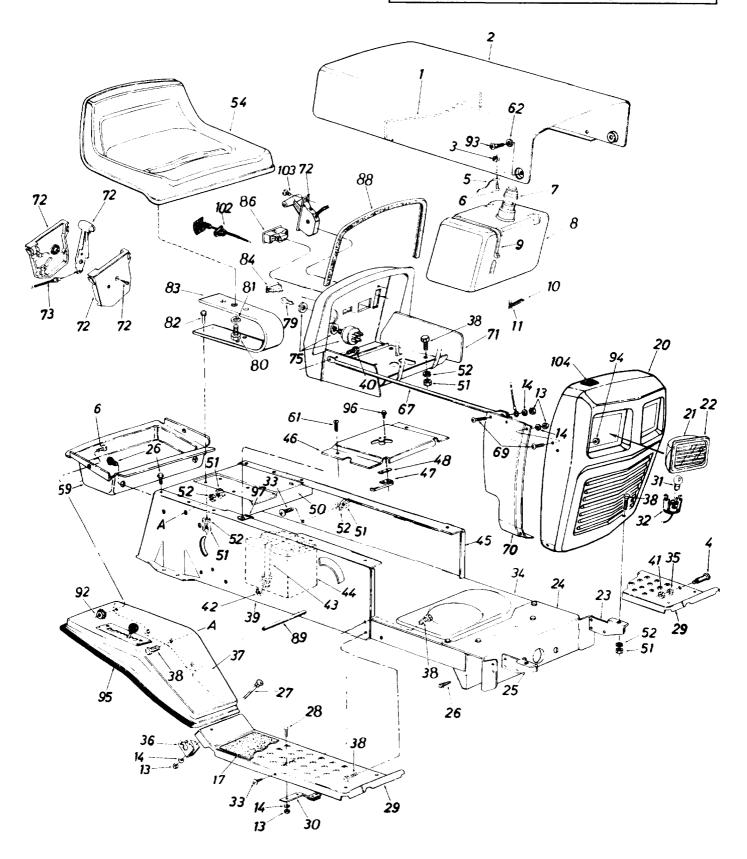


12 H.P. 38" LAWN TRACTORS
PARTS LIST FOR MODELS TMO-33920A AND TMO-33921A

REF. NO.	PART NO.	DESCRIPTION	NEW PART		PART NO.	DESCRIPTION	NEW PART
1	16521	Chute Bracket		21	736-0329	L-Wash. 1/4" I.D.	
2	16566	Chute Deflector		22	738-0373	Shld. Bolt .498" Dia. x 1.53"	
3	16575	38" Deep Deck Ass'y.		23	742-0472	High-Lift Blade (L.H.)	
	801-6576	38" Deep Deck Ass'y. Comp.		25	748-0300	Blade Adapter	1
1		(For Service Only)		26	754-0329	5L V-Belt	
4	16607	Belt Guard Deck-L.H.		27	08253	Bearing Housing 1.85" I.D.	
5	16608	Belt Guard Deck-R.H.		28	09322	Brake Disc	
6	710-0152	Hex Bolt 3/8-24 x 1.00"		29	13703	Bearing Shield	}
7	710-0195	Hex Bolt 1/4-28 x .62"		30	15296	Open Brg. Housing 1.85" I.D.	
8	710-0255	Truss Mach. Scr. 1/4-20 x		31	16603	Spindle Meeting Plate	
1		.75"		32	710-0157	Hex Bolt 5/16-24 x .75"	
9	710-0888	Hex Scr. Special 5/16-24 x 1.0"		33	710-0888	Hex Bolt Special 5/16-24 x 1.0"	
10	711-0792	Hinge Pin		34	742-0473	High-Lift Blade (R.H.)	
11	712-0123	Hex Nut 5/16-24 Thd.		35	712-0318	Hex Jam Nut 5/8-18 Thd.	
12	712-0138	Hex Nut 1/4-28 Thd.		37	736-0158	L-Wash. 5/8" I.D.	l
13	712-0181	Hex Top L-Nut 3/8-16 Thd.		38	736-0242	Bell-Wash345" I.D. x .88"	
14	712-0298	Hex Jam Nut 1/4-20 Thd.				O.D.	
16	732-0542	Torsion Spring		39	738-0707	Blade Spindle	1
17	734-0973	Deck Wheel—5"		40	741-0919	Ball Brg787" I.D. x 1.85"	1
18	736-0105	Bell-Wash40" I.D. x .88"		41	750-0456	Spacer 1.0" O.D. x .790" I.D.	}
19	736-0119	L-Wash. 5/16" I.D.				x .350″	
20	736-0217	L-Wash. 3/8" I.D.—H.D.		42	756-0486	5" Dia. Pulley	

### TMO-33920A

Parts shown are for Model TMO-33920A Only—For Model TMO-33921A, see page 28.



### TMO-33920A

## 12 H.P. 38" LAWN TRACTOR PARTS LIST FOR MODEL TMO-33920A

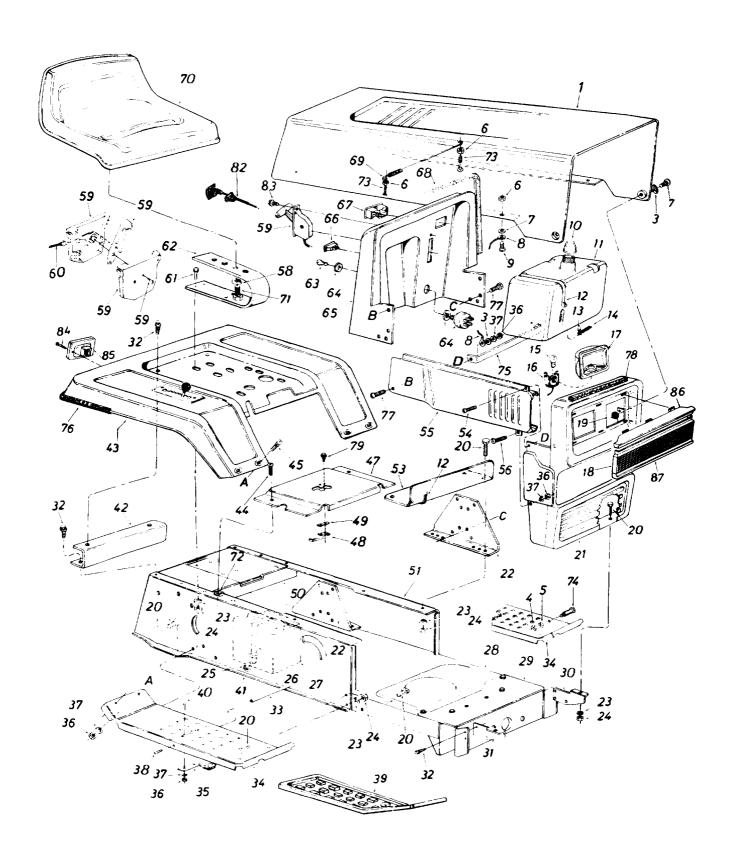
		1		r	L INO-33920A	1	NEW
REF. NO.	PART NO.	DESCRIPTION	NEW PART	REF.	PART NO.	DESCRIPTION	PART
1	732-0414	Hood Spring		45	14603CC621	L.H. Side Frame	
2	14665CC621	Hood		46		Shift Cover	
3	712-0272	Hex Sems Nut #10-24 Thd.*	ŀ	47	725-0759	Reverse Safety Switch	
4	738-0145	Shid. Bolt .50 Dia. x .84		48		Insulator Nut Plate	
5	723-0302	Hood Stop 7" Lg.		50	14607	Hitch Plate	
6	710-0473	Truss Hd. Scr. #10-24 x ½"*		51	712-0267	Hex Nut 5/16-18 Thd.*	
7	723-0333	Fuel Cap Gauge		52	736-0119	L-Wash. 5/16" I.D.*	
8	751-0172	Fuel Tank	-	54		Seat Ass'y.	
9	726-0209	Tie Strap		59	731-0561	Tool Tray	
- 1	751-0173	Fuel Line		61	710-0351	Truss Mach. Tap Scr. #10 x	
	726-0207	Hose Clamp			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.50" Lg.	
	712-0287	Hex Nut 1/4-20 Thd.*		62	736-0413	Washer .39" I.D. x .62"	
	736-0329	L-Wash. 1/4" I.D.*		67	749-0517	Grille Support Rod (R.H. &	
17	723-0360	Foot Pad				L.H.)	
	17025	Grille Ass'y.	N	69	710-0255	Truss Hd. Scr. 1/4-20 x .75" *	
21	731-0705	Headlight Housing	1	70	16619	R.H.—Grille Side Panel	
22	731-0706	Headlight Lens			16621	L.H.—Grille Side Panel	
23	13863	Grille Mount Brkt.—L.H.		71	16184	Dash Panel Ass'y.	
	14619	Front Pivot Brkt.			831-0823	Throttle Control Box Ass'y.	
25		Grille Mount Brkt.—R.H.			746-0638	Throttle Control Wire	
26		Hex Wash. Hd. AB-Tap Scr.	1	75	725-0267	Ignition Switch	
20	710-0720	5/16 x .75" Lg.		79	725-0201	Ignition Key	
27	710-0495	Carriage Bolt 1/4-20 x 2.0" *		80	710-0865	Hex Bolt 1/2-13 x 1.00" Lg.	
28		Carriage Bolt 1/4-20 x .62" *				(2-Reg'd.)	
29	14604	Running Board (R.H. & L.H.)		81	736-0921	L-Wash. 1/2" I.D.*	
30		Blade Brake Ass'y.		82	710-0376	Hex Bolt 5/16-18 x 1.0" *	
31		Head Lamp		83		Seat Spring 5.5" High	
32		Twist Lock Lamp Socket		84	725-0634	Light Switch	
33	710-0323	Truss Mach. Scr. 5/16-18 x		86	725-0925	Ammeter	
		.75" Lg.*		88	731-0511	Molding Strip 27" Lg.	
34	15950	Lower Frame		89		Running Board Rod	
35		L-Wash. 3/8" I.D.*		92	712-0272	Hex Sems Nut #10-24 Thd.	
36		Fender Clamp		93		Shld. Bolt .375 Dia. x .125	
37	16197CC621	Fender (R.H.)	1	94		L-Nut 1/4-28 Thd.	
	14666CC621	Fender (L.H.)		95	731-0511	Trim Strip—57" Lg.	
38		Hex Bolt 5/16-18 x .75" Lg.*		96	710-0227	Hex Wash. Hd. AB-Tap Scr.	
39	14602CC621	R.H. Side Frame				#8 x .50" Lg.	
40	710-0258	Hex Bolt 1/4-20 x .62" Lg.*		97		Speed Nut #10Z	
41	712-0798	Hex Nut 3/8-16 Thd.*		102	746-0615	Choke Control 29" Lg.	
42	747-0475	Battery Strap Hook		103	710-0779	Truss Mach. AB-Tap Scr.	
43	731-0718	Battery Hold Down Strap				#10 x .50" Lg.	
44	725-0514	12-V Battery		104	722-0157	Foam Strip 3/8 x 1-1/8 x 11/2	

<sup>\*</sup>Common Hardware—May be purchased locally. Important: **Do not** order by reference number (Ref. No.).

NOTE: Specifications subject to change without notice or obligation.

### TMO-33921A

Parts shown are for Model TMO-33921A Only—For Model TMO-33920A, see page 26.



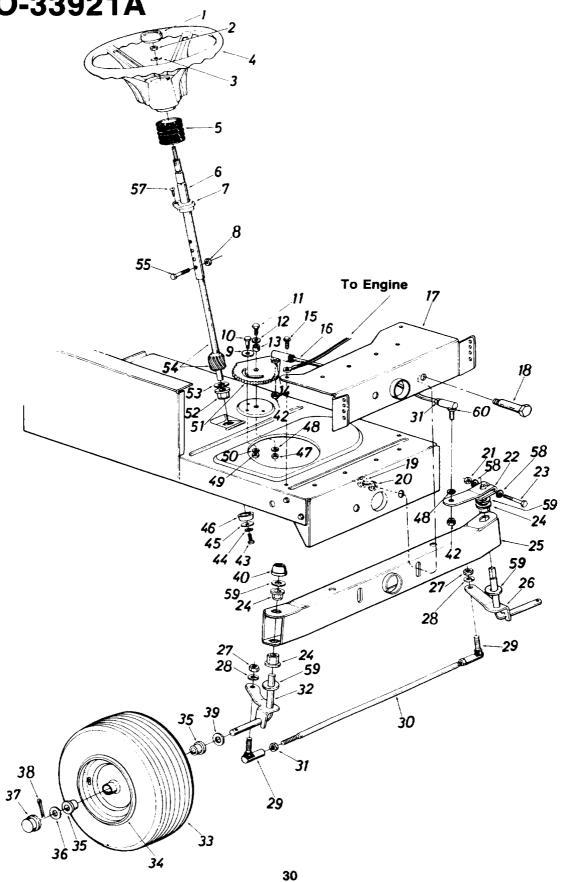
# TMO-33921A

# 12 H.P. 38" LAWN TRACTOR PARTS LIST FOR MODEL TMO-33921A

REF. NO.	PART NO.	DESCRIPTION	NEW PART	REF. NO.	PART NO.	negrolotion (	NEW PART
1	15808CC621	Hood		45	710-0167	Carriage Bolt 1/4-20 x .50" *	
2	738-0724	Shld. Bolt .375 Dia. x .125		47	16433	Transmission Panel	
_		Lg.	N	48	725-0759	Reverse Safety Switch	
3	736-0413	Washer .34" I.D. x .62" O.D.	''	49	726-0222	Insulator Nut Plate	
4	712-0798	Hex Nut 3/8-16 Thd.*		50	14607	Hitch Plate	
5	736-0169	L-Wash. 3/8" I.D.*		51	14603CC621	L.H. Side Frame	
6	712-0272	Hex Sems Nut #10-24 Thd.*		53	14605	Fuel Tank Support	
7	736-0931	Fl-Wash203" I.D. x .41"		54	710-0255	Truss Hd. Scr. ¼-20 x .75"	
	. 30 300 /	O.D. x .040		] 37	710-0255	Lg.*	
8	727-0290	Hood Stop		55	15814	Side Cover—R.H.	
9	710-0473	Truss Hd. Scr. #10-24 x ½"*		33	15815	Side Cover—L.H. (Not	
10	723-0333	Fuel Cap Gauge			13613	Shown)	
111	751-0172	Fuel Tank		E6	710 0296		
12	726-0209	Tie Strap		56	710-0286	Truss Mach. Scr. 1/4-20 x	
13	1			50	706 0004	.50" Lg.*	
1	726-0207	Hose Clamp		58	736-0921	L-Wash. ½" I.D.*	
14	751-0173	Fuel Line		59	831-0823	Throttle Control Box Ass'y.	
15	725-0963	Lamp		60	746-0501	Throttle Control Wire	
16	725-1058	Twist Lock—Lamp Socket		61	710-0376	Hex Bolt 5/16-18 x 1.0" *	
17	731-0705	Headlight Housing		62	732-0458	Seat Spring 5.5" High	
18	731-0787	Headlight Bezel		63	725-0201	Ignition Key	
19	712-0380	L-Nut 1/4-28 Thd.		64	725-0267	Ignition Switch	
20	710-0118	Hex Bolt 5/16-18 x .75" Lg.*		65	16489	Dash Panel	
21	16457CC621	Grille		66	725-0634	Light Switch	
22	15818	Dash Support Bracket		67	725-0925	Ammeter	
23	736-0119	L-Wash. 5/16" I.D.*		68	731-0511	Trim Strip—27"	
24	712-0267	Hex Nut 5/16-18 Thd.*		69	732-0462	Hood Spring	
25	747-0475	Battery Strap Hook		70	757-0318	Seat Ass'y.	
26	731-0718	Battery Hold Down Strap		71	710-0865	Hex Bolt 1/2-13 x 1.0" Lg.	
27	725-0514	12V Battery				(2 Req'd.)	
28	15930	Lower Frame		72	726-0139	Speed Nut #10Z	
29	14619	Front Pivot Brk't.		73	710-0749	Hex Scr. #10-24 x 1.0" Lg.	
30	15821	Grille Mount Brk't.—L.H.		74	738-0145	Shld. Bolt .50 Dia. x .84	
31	15822	Grille Mount Brk't.—R.H.		75	15931	Tie Strap—Grille/Side Panel	
32	710-0726	Hex Wash. Hd. AB-Tap Scr.		76	731-0511	Trim Strip—81"	
		5/16 x .75" Lg.		77	710-0642	Hex Wash. Hd. Tap Scr.	
33	738-0526	Running Board Rod				1/4 x .75" Lg.	
34	14604	Running Board (R.H. & L.H.)		78	722-0157	Foam Strip 3/8 x 1-1/8" x	
35	761-0168	Blade Brake Ass'y.				11/2" Lg. (2 Req'd.)	
36	712-0287	Hex Nut 1/4-20 Thd.*		79	710-0227	Hex Wash. Hd. AB-Tap #8 x	
37	736-0329	L-Wash. 1/4" I.D.*				.50" Lg.	
38	710-0323	Truss Mach. Scr. 5/16-18 x		82	746-0615	Choke Control 29" Lg.	
		75" Lg.*		83	710-0779	Truss Mach. AB-Tap Scr.	
39	731-0753	Foot Pad		-		#10 x .5" Lg.	
40	710-0134	Carriage Bolt 1/4-20 x .62"*		84	710-0936	Truss Hd. AB-Tap Scr. #6 x	
41	14602CC621	R.H. Side Frame		•	''	.62" Lg.	
42	15848	Fender Mount Brace		85	725-1128	Taillight	
43	16472CC621	Rear Fender		86	731-0788	Upper Frame For Bezel	
44	710-0351	Truss Mach. Tap Scr. #10 x		87	731-0789	Lower Frame For Bezel	
1		.50" Lg.		•	. 5. 5. 50	2001 1 40 1 01 00201	
	l			l			

<sup>\*</sup>Common Hardware—May be purchased locally. Important: **Do Not** order by reference number (Ref. No.).

NOTE: Specifications subject to change without notice or obligation.



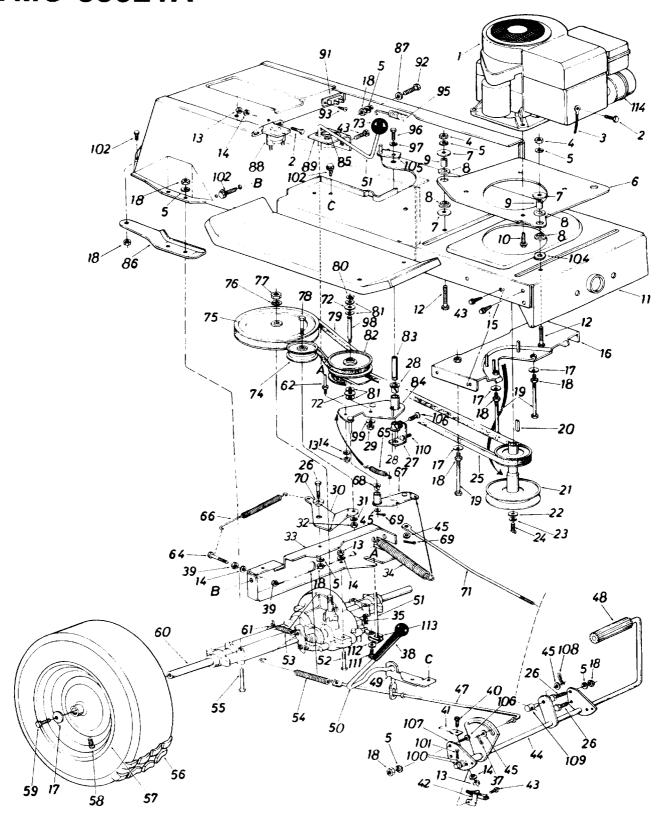
### 2 I A 12 H.P. 38" LAWN TRACTORS PARTS LIST FOR MODELS TMO-33920A AND TMO-33921A

REF. NO.	PART NO.	DESCRIPTION	NEW PART	REF.	PART NO.	DESCRIPTION	NEW PART
1	731-0220	Steering Wheel Cap		30	711-0613	Tie Rod	
2	712-0123	Hex Nut 5/16-24 Thd.		31	712-0711	Hex Jam Nut 3/8-24 Thd.*	
3	736-0242	Belleville Wash345" I.D.		32	14650	Front Axle Ass'y.—R.H.	
4	731-0806	Steering Wheel		33	734-0863	Wheel Ass'y. Comp.	
5	731-0559	Steering Bellow			734-0864	Tire Only	
6	16512	Steering Column Ass'y.		34	734-0997	Front Wheel Rim Only	ŀ
7	741-0356	Flange Bearing .890 I.D. x			734-0255	Air Valve	
	-	1.36 O.D.			737-0146	Grease Fitting	
8	712-0324	Hex L-Nut 1/4-20 Thd.		35	741-0487	Bearing	
9	736-0319	FI-Wash438" I.D. x 1.37" O.D.		36	736-0285	FI-Wash635 I.D. x 1.59" O.D.	
10	738-0141	Shoulder Bolt .437" Dia. x		37	731-0484	Front Wheel Hub Cap	
		.35 Lg. 5/16-18 Thd.		38	714-0470	Cotter Pin 1/8" Dia. x 1.25"*	
11	710-0152	Hex Bolt 3/8-24 x 1.0" Lg. (Grade 5)		39	736-0187	Fl-Wash640" I.D. x 1.24" O.D.	
12	736-0258	Fl-Wash38" I.D. x 1.0"		40	726-0214	Push Cap 5/8" Dia. Rod	
'-	. 55 5255	O.D.	į	42	712-0241	Hex Nut 3/8-24 Thd.*	
13	750-0535	Spacer .380" I.D. x .625"		43	710-0538	Hex L-Bolt 5/16-18 x .62" *	
		O.D. x .227		44	736-0119	L-Wash. 5/16" I.D.*	
14	736-0169	L-Wash38" I.D.*		45	736-0231	FI-Wash344" I.D. x 1.25"	
15	710-0726	Hex Wash. Hd. Self-Tap Scr.				O.D.	
16	711-0788	Steering Drag Link		46	750-0532	Spacer (Plastic)	
17	14619	Front Pivot Brkt.		47	712-0241	Hex Nut 3/8-24 Thd.*	
18	738-0527	Shoulder Bolt .498" Dia. x	1	48	736-0169	L-Wash. 3/8" I.D.*	
		2.04 Lg. 3/8-16 Thd.	ĺ	49	712-0267	Hex Nut 5/16-18 Thd.*	
19	712-0798	Hex Nut 3/8-16 Thd.*		50	736-0119	L-Wash. 5/16" 1.D.*	
20	736-0169	L-Wash. 3/8" I.D.*		51	717-0622	Steering Gear Segment	-
21	712-0237	Hex Cent. L-Nut 5/16-24		52	741-0225	Hex Flg. Brg634 I.D.	
1		Thd.		53	736-0187	FI-Wash. (Hardened)	
22	16481	Steering Arm Front Axle		54	738-0522	Steering Shaft Lower	
23	710-0772	Hex Bolt 5/16-24 x 2.00"		55	710-0985	Hex Bolt 1/4-20 x 1.31" Lg.	
1		Lg. (Grade 5)		57	710-0837	Oval Hd. Cr.—Sunk Scr.	
24	741-0225	Hex Flg. Brg634 I.D.				#10 x 5/8" Lg.	
25	14608	Pivot Bar Ass'y.		58	736-0271	Wave-Wash32" I.D. x .62"	
26	16479	Front Axle Ass'y.—L.H.		1		O.D.	
27	712-0241	Hex Nut 3/8-24 Thd.*		59	736-0187	FI-Wash. (Hardened)	
28	736-0169	L-Wash. 3/8" I.D.*	1	60	723-3018	Drag Link Ball Joint 3/8-24	
29	723-3018	Ball Joint 3/8-24 Thd.*				Thd.	

†Steering Shaft With Two Flats ††Steering Shaft With Splined End

<sup>\*</sup>Common Hardware—May be purchased locally. Important: **Do Not** order by reference number (Ref. No.).

Part No.	Description	Part No.	Description
788-0621	Brilliant Fire Mist Spray Paint	777-6932	Labels—Frame Side
788-0452	Black Spray Paint		(TMO-33921A)
777-5268	Steering Cap Label	777-7093	Labels—Hood Stripe
777-6534	F-N-R Shift Label		(TMO-33920A)
777-6827	Montgomery Ward Logo—Grille	777-7094	Labels—Hood Stripe
777-6891	Label—7 Speed		(TMO-33921A)
777-7002	Montgomery Ward Logo— Side of Hood	777-7100	Plastic Hood Side Stripe (TMO-33921A)
777-7105	Transmatic Label	777-6691	Label—Dash Panel (TMO-33920A)
777-1068	Labels—Frame Side	777-5904	Label-Dash Panel (TMO-33921A)
	(TMO-33920A)	770-5940B	Operating Manual



# TMO-33920A TMO-33921A 12 H.P. 38" LAWN TRACTORS

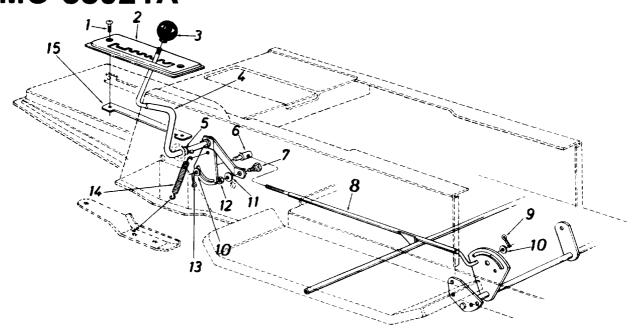
### PARTS LIST FOR MODELS TMO-33920A AND TMO-33921A

REF.	PART NO.	DESCRIPTION	NEW PART		PART NO.	DESCRIPTION	NEW PART
1	12 H.P.	Engine—Tec. OVXL120		50	15888	Hill Holder Brake Handle	
		(TMO-33920A)		51	16430	Shitt Lever Ass'y.	
	12 H.P.	Engine—B&S 281707-0137-01		52	710-0559	Hex Bolt 1/4-28 x 1.75" Lg.*	
		(TMO-33921A)		53	732-0264	Ext. Spring .38" O.D. x 2.5"	
2	710-0258	Hèx Bolt 1/4-20 x .62" Lg.*		54	732-0413	Ext. Spring .59" O.D. x 7.08"	[ [
3	725-0122	Electric Ground Wire		55	710-0176	Hex Bolt 5/16-18 x 2.75" *	
4	712-0123	Hex Nut 5/16-24 Thd.*		56	734-0817	Wheel Ass'y. Comp.	1 1
5	736-0119	L-Wash. 5/16" I.D.*			734-0448	Tire Only	
6	14791	Engine Mounting Plate		57	734-0603	Wheel Rim Only	
7	736-0343	Fl-Wash320" I.D. x 1.25"		58	734-0255	Air Valve (Service Only)	
8	722-0153	Engine Mounting Grommet		59	710-0627	Hex Bolt 5/16-24 x .75" Lg.*	
9	750-0539	Spacer	ĺ	60	717-1050	Transaxle Complete	
10	710-0650	Hex Wash. Hd. TT-Tap Scr.		61	732-0454	Brake Return Spring Anchor	
j l		5/16-18 x 7/8" Lg.	1	62	711-0768	Belt Guard Pin 1/4-20 Thd.	
		(TMO-33920A)		64	710-0428	Hex Bolt 1/4-28 x 1.25" Lg.*	
	710-0502	Hex Bolt 3/8-16 x 1.25" Lg.		65	732-0568	Ext. Spring	
1		(TMO-33921A)		66	732-0384	Ext. Spring .62" O.D. x 6.12"	
11	15930	Lower Frame Ass'y.		67	16554	Variable Speed Torque	
12	710-0158	Hex Bolt 5/16-24 x 1.25"*				Brkt. Ass'y.	
13	712-0287	Hex Nut 1/4-20 Thd.*		68	741-0419	Flanged Bearing	
14	736-0329	L-Wash. ¼" I.D.*		69	714-0507	Cotter Pin 3/32" Dia.*	
15	710-0781	Hex Wash. Hd. AB-Tap Scr.		70	748-0234	Shoulder Spacer .27" Lg.	
		_ 5/16" x .75" Lg.	1	71	747-0530	Speed Control Link	
16	15898	Belt Guard Brkt. Ass'y.		72	741-0405	Truss Bearing .56 Dia. x	
17	736-0242	Bell-Wash345" I.D. x .88"				1.25"	
18	712-0267	Hex Nut 5/16-18 Thd.*		73	720-0165	Knob (TMO-33920A)	
19	710-0833	Hex Bolt 5/16-18 x 5.25" Lg.			720-0210	Knob (TMO-33921A)	
20	714-0114	Sq. Key ¼" x ¼" x 2.00"		74	756-0437	FI-Idler Pulley 3.25" x 1.0"	
21	756-0488	Engine Pulley		75	756-0374	½" "V"-Pulley 8.0" O.D.	
22	736-0322	Fl-Wash. 7/16" I.D. x 1.25"		76	726 0021	x .501" I.D.	
23	736-0171	L-Wash. 7/16" I.D.*	1	76	736-0921 712-0922	L-Wash. ½" I.D.* Hex Jam Nut ½-20 Thd.*	]
24	710-0757	Hex Bolt 7/16-20 x 1.50" Lg.		78	712-0922	Hex Bolt 3/8-24 x .75" Lg.*	
25 27	754-0280 16553	Variable-Speed Belt		79	754-0281	Variable Speed Belt	
21	10000	Bearing Shaft Bracket	1	80	716-0114	Snap Ring .56" Dia.	
20	741-0295	Ass'y. Flanged Nyliner Bearing	}	81	736-0355	FI-Wash.	
28 29	712-0293	Hex Nut 3/8-24 Thd.*		82	717-0800	Variable Speed Pulley	
30	15891	Idler Bracket		UZ	717-0000	Ass'y. 5" O.D.	
31	736-0169	L-Wash. 3/8" I.D.*		83	711-0766	Bearing Shaft	
32	712-0241	Hex Nut 3/8-24 Thd.*		84	16354	Variable Speed Brkt. Ass'y.	}
33	15945	Transaxle Support Brkt.		85	732-0525	Comp. Spring—Clip	
34	732-0459	Ext. Spring .94" O.D. x 6.7		86	14770	Transaxle Support Brkt.—	
35	714-0149	Inter. Cott-Pin				R.H.	
37	714-0507	Cotter Pin 3/32" Dia. x .75"*			14769	Transaxle Support Brkt.—	
38	720-0143	Grip—Black				L.H. (Not Shown)	-
39	712-0138	Hex Nut 1/4-28 Thd.		87	736-0231	FI-Wash34 I.D. x 1.12 O.D.	
40	710-0597	Hex Bolt 1/4-20 x 1.00" Lg.*		88	725-0771	Solenoid	1
41	732-0435	Switch Actuator		89	16429	Shift Lever Bracket	
42	725-0577	Safety Switch		91	725-0459	Circuit Breaker	
43	710-0599	Hex Wash. Hd. S-Tap Scr.		92	710-0959	Hex Bolt 5/16-18 x 1.50" Lg.	
1		1/4-20 x .50" Lg.		93	710-0351	Truss Hd. Phil. Scr. #10 x	
44	16235	Clutch & Brake Pedal				½" Lg.	1
]		Ass'y.		95	732-0307	Ext. Spring .99" O.D. x 11"	-
45	736-0117	Fl-Wash.		96	710-0180	Hex Bolt 3/8-24 x .75" Lg.*	1
47	747-0519	Brake Rod 20.9" Lg.		97	736-0105	Bell-Wash38" I.D. x .88"	
48	735-0196	Foot Pad		98	738-0569	Shaft .56" Dia. x 3.875" Lg.	
49	15889	Brake Lever Bracket	1	99	736-0331	Bell-Wash39" I.D. x 1.12"	-
	<u> </u>	1	<del></del>	1	1		1

12 H.P. 38" LAWN (RACTORS
PARTS LIST FOR MODELS TMO-33920A AND TMO-33921A (CONTINUED)

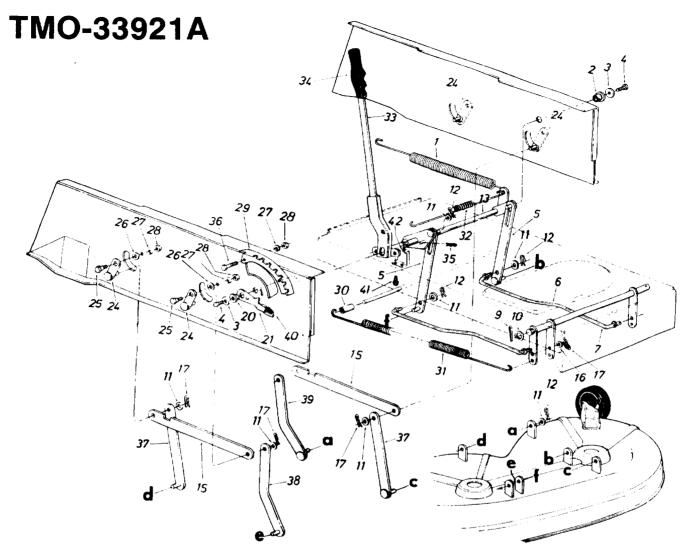
REF. NO.	PART NO.	DESCRIPTION	NEW PART	REF. NO.	PART NO.	DESCRIPTION	NEW
100	736-0256	FI-Wash.		109	711-0198	Ferrule	
101	714-0111	Cotter Pin 3/32" Dia. x 1.0"*		110	710-0971	Truss Phillips Hd. Scr.	
102	710-0604	Hex Wash. Hd. Scr. 5/16-18				5/16-18 x 1.0" Lg.	
		x .62" Lg.		111	710-0195	Hex Bolt 1/4-28 x .50" Lg.	
104	736-0362	Fl-Wash32" I.D. x 1.25"		112	736-0270	Bell-Wash265" I.D. x .75"	
105	16067	Belt Guard		113	16437	Shift Lever Link Ass'y.	
106	710-0323	Truss Mach. Scr. 5/16-18 x		114	751-0302	Muffler (TMO-33921A Only)	
		.75" La.*		_	712-0250	Conduit L-Nut 1"	
107	15835	Pedal Bracket				(TMO-33921A Only)	
108	714-0507	Cotter Pin 3/32" Dia. x .75"				(*************************************	

# TMO-33920A TMO-33921A



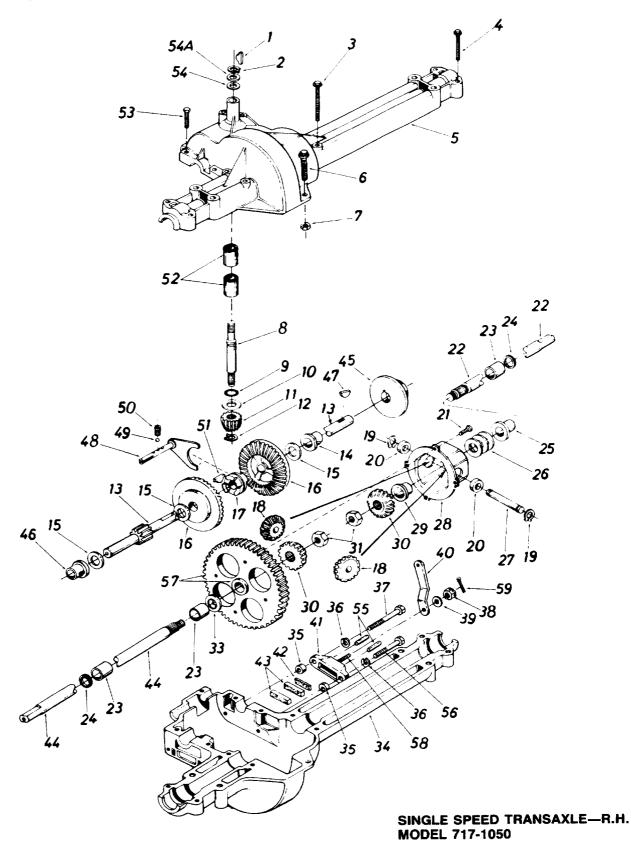
12 H.P. 38" LAWN TRACTORS
PARTS LIST FOR MODELS TMO-33920A AND TMO-33921A

REF. NO.	PART NO.	DESCRIPTION	NEW PART		PART NO.	DESCRIPTION	NEW PART
1	710-0924	Truss Mach. Scr. ¼-20 x .75" Lg.		8 9	16355 714-0507	Speed Control Rod Ass'y. Cotter Pin 3/32" Dia. x .75"	
2	16194	Speed Selector Plate 7-Speed		10	736-0226	Lg.* Fl-Wash469" I.D. x .88"	
3	720-0175	Gear Shift Knob				O.D.	
4	16192	Speed Selector Cam Ass'y.		11	736-0119	L-Wash. 5/16" I.D.*	
5	736-0192	Flat Washer .53" I.D. x		12	712-0267	Hex Nut 5/16-18 Thd.*	
		.93" O.D.		13	714-0507	Cotter Pin 3/32" Dia. x .75"	
6	711-0198	Ferrule 3/8-24 x .37" Dia.		ĺ		Lg.*	
7	738-0155	Shoulder Bolt .435" Dia. x .160		14 15	732-0303 16196	Spring .38" O.D. x 3.18" Lg. Clamping Plate	



12 H.P. 38" LAWN TRACTORS
PARTS LIST FOR MODELS TMO-33920A AND TMO-33921A

REF. NO.	PART NO.	DESCRIPTION	NEW PART		PART NO.	DESCRIPTION	NEW PART
1	732-0307	Extension Spring 11" Lg.		26	736-0264	Fl-Wash344" I.D. x .62"	
2	741-0313	Flange Bearing .634" I.D.		27	736-0119	L-Wash. 5/16" I.D.*	
3	736-0231	Fl-Wash344" I.D. x 1.125"		28	712-0267	Hex Nut 5/16-18 Thd.*	
4	710-0604	Hex Wash, Hd. 5/16-18 x		29	16462	Index Brkt.	
		.62" Lg.		30	711-0425	Spacer .523" I.D. x .640"	İ
5	14802	Link Deck Lift Ass'y.				O.D. x 1.95" Lg.	
6	711-0790	Stabilizer Rod		31	732-0530	Ext. Spring 13.25" Lg.	
7	16234	Stabilizer Shaft Ass'y.	i	32	732-0498	Ext. Spring 32 Coils	
9	714-0470	Cotter Pin 1/8" Dia. x 11/4"*		33	16465	Lift Handle Ass'y.	
10	736-0156	FI-Wash635" I.D. x 1.12"		34	720-0157	Grip (Lift Handle)	
11	736-0160	FI-Wash531" I.D. x .940"		35	714-0145	Intern. Cotter Pin 1/2" Dia.	
12	714-0111	Inter. Cotter Pin		36	710-0118	Hex Bolt 5/16-18 x .75"*	
13	16468	Lift Shaft Ass'y.		37	14804	Link Deck Hanger Ass'y.	
15	09735	Connecting Rod		38	14800	Link Deck Hanger Ass'y.	1
16	736-0300	FI-Wash40" I.D. x .88"	İ			(Dog Leg)	
17	714-0104	Inter. Cotter Pin-3/8" Rod		39	15925	Link Deck Hanger Ass'y	
20	748-0176	Flange Brg630" I.D.				L.H.	İ
21	732-0412	Deck Lift—Down Stop		40	08540	Knob	
24	09721	Pivot Link Ass'y.		41	710-0351	Hex AB-Tap Scr. #10 x .50"	
25	738-0140	Shld. Bolt .437" Dia. x .180" Lg. (5/16-18)		42	725-0803	Safety Switch	



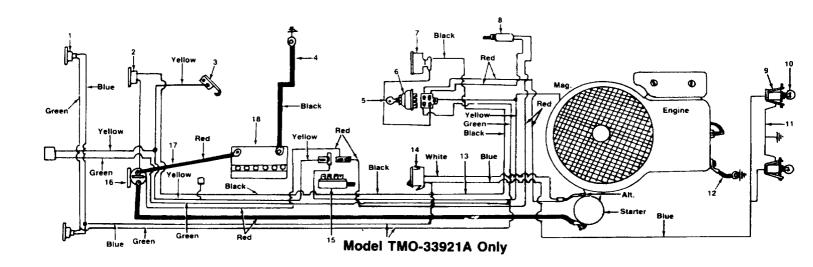
## PARTS LIST FOR SINGLE SPEED TRANSAXLE RIGHT HAND 717-1050

2   716-0115	REF. NO.	PART NO.	DESCRIPTION	NEW PART		PART NO.	DESCRIPTION	NEW PART
3   710-0854	1	714-0129	#4 Hi-Pro Key 3/32 x 5/8" Dia.		33	736-0351	FI-Wash75" I.D. x 1.5" O.D.	
3   710-0854	2	716-0115	Snap Ring .625" Shaft		34	717-0761	Lower Housing	1 1
4   710-0809	3	710-0854	Hex Bolt 1/4-20 x 1.75" Lg.*		35	750-0555	Spacer .53" O.D. x 3/8" Lg.	
File   File	4	710-0809	Hex Bolt 1/4-20 x 1.25" Lg.*			736-0329	L-Wash. 1/4" I.D.*	
7         712-0287         Hex Nut ¼-20 Thd.* Input Shaft         38         712-0335         Castle Nut 5/16-24 Thd.* FI-Wash34" I.D. x .875" O.D.           10         736-0335         Thrust Washer 5/8" I.D. x 1.25" O.D.         40         717-0679         Actuating Arm—R.H.           11         717-0633         Pinion Input 14T         42         717-0682         Puck Plate           12         716-0108         Retaining Ring 7/16" Ext.         43         717-0678         Brake Puck           13         717-0758         Drive Shaft—R.H.         44         717-0678         Brake Puck           14         741-0336         Flange Brg. 5/8" I.D. x ¾"         45         717-0678         Brake Disc           15         Fl-Wash. (See Below)         Fl-Wash. (See Below)         Flange Bearing 5/8" I.D. x 15/16" Lg.         741-0337         Flange Bearing 5/8" I.D. x 15/16" Lg.           19         716-0142         Snap Ring         48         717-0754         Shift Fork Ass'y.           20         717-0690         Thrust Bearing ½" I.D. x 1.0"         51         714-0169         #9 Hi-Pro Key 3/16" x ¾"           21         710-0862         Pan Head Scr. ¼-20 x .50"         52         741-0335         Hex Bolt ¼-20 x 1.00" Lg.           22         717-1012         Axle R.H. <td>5</td> <td>717-0764</td> <td>Upper Housing</td> <td></td> <td>37</td> <td>710-0886</td> <td>Hex Bolt 1/4-20 x 1.50" Lg.</td> <td></td>	5	717-0764	Upper Housing		37	710-0886	Hex Bolt 1/4-20 x 1.50" Lg.	
8		710-0642	Hex FI-Bolt 1/4-20 x .75" Lg.					
9	7			İ				
10	8	717-0634			39	736-0371	FI-Wash34" I.D. x .875"	
1.25" O.D.   2717-0633   Pinion Input 14T   2717-0682   Pinch Input 14T   2716-0108   Retaining Ring 7/16" Ext.   43 717-0682   Brake Yoke Puck Plate   Puck Pl	9	721-0178	Square Seal 5/8" I.D.					
11	10	736-0335	Thrust Washer 5/8" I.D. x		40	717-0700	Actuating Arm—R.H.	
T16-0108			1.25" O.D.	ŀ	41		Brake Yoke	
13	11	717-0633	Pinion Input 14T		42	717-0682	Puck Plate	
Target Brg. 5/8" I.D. x 3/4"   Lg.*   Flange Brg. 5/8" I.D. x 3/4"   Lg.*   Fl-Wash. (See Below)   Fl-Wash. (See Below)   Fl-Wash. (See Below)   Fl-Wash. (See Below)   Target Bearing 5/8" I.D. x 15/16" Lg.   Target Bearing 5/8" I.D. x 15/16" Lg	12	716-0108	Retaining Ring 7/16" Ext.		43	717-0678	Brake Puck	
Lg.*   Fl-Wash. (See Below)   Fl-Wash. (See Below)   Sevel Gear 42T   T77-0757   Clutch Collar   48   717-0754   Shift Fork Ass'y.   Shift Fork	13	717-0758	Drive Shaft—R.H.		44	717-1011	Axle L.H.	
Lg.*   FI-Wash. (See Below)   Hi-Wash. (See	14	741-0336	Flange Brg. 5/8" I.D. x 3/4"		45	717-0677	Brake Disc	
15					46	741-0337	Flange Bearing 5/8" I.D. x	
16	15	**	Fl-Wash. (See Below)				15/16" Lg.	
17	16	717-0757	Bevel Gear 42T	1	47	714-0161	Woodruff Key 3/16 x 5/8 HT	
19       716-0142       Snap Ring       50       732-0863       Spring Detent         20       717-0690       Thrust Bearing ½" I.D. x       1.0" O.D.       #9 Hi-Pro Key 3/16" x ¾"         21       710-0862       Pan Head Scr. ¼-20 x .50"       52       741-0335       Needle Brg. 5/8" I.D. x ½"         22       717-1012       Axle R.H.       53       710-0855       Hex Bolt ¼-20 x 1.00" Lg.         23       741-0340       Sleeve Bearing ¾" I.D. x       54       736-0336       FI-Wash. 5/8" I.D. x .030         24       721-0179       Oil Seal ¾" I.D.       54       736-0337       FI-Wash. 5/8" I.D. x .040         25       741-0339       Flange Bearing ¾" I.D. x .15/16" Lg.       55       741-0343       Actuating Pin 5/16" Dia.         26       736-0188       FI-Wash760" I.D. x 1.49" O.D.       56       710-0886       Hex Bolt ¼-20 x 1.50" Lg.         27       717-0673       Cross Shaft Differential Housing Ass'y.       58       717-0796       Sq. Hd. Bolt 5/16-24 Thd. Cotter Pin 3/32" Dia. x .50"         29       —       Comes with Ref. 28       59       1544-013       Cotter Pin 3/32" Dia. x .50"	17	717-0667	Clutch Collar		48	717-0754	Shift Fork Ass'y.	
20       717-0690       Thrust Bearing ½" I.D. x 1.0" O.D.       51       714-0169       #9 Hi-Pro Key 3/16" x ¾" Dia. HT         21       710-0862       Pan Head Scr. ¼-20 x .50" Lg. w/Patch       52       741-0335       Needle Brg. 5/8" I.D. x ½" Lg.         22       717-1012       Axle R.H.       53       710-0855       Hex Bolt ¼-20 x 1.00" Lg.         23       741-0340       Sleeve Bearing ¾" I.D. x 1.0" Lg.       54       736-0336       FI-Wash. 5/8" I.D. x .030         24       721-0179       Oil Seal ¾" I.D.       54B 736-0349       FI-Wash. 5/8" I.D. x .020         25       741-0339       Flange Bearing ¾" I.D. x 1.49" O.D.       55       741-0343       Actuating Pin 5/16" Dia. Hex Bolt ¼-20 x 1.50" Lg.         26       736-0188       FI-Wash760" I.D. x 1.49" O.D.       56       717-0586       Hex Bolt ¼-20 x 1.50" Lg.         27       717-0673       Cross Shaft Differential Housing Ass'y.       58       717-0796       Sq. Hd. Bolt 5/16-24 Thd. Cotter Pin 3/32" Dia. x .50"         29       —       Comes with Ref. 28       59       1544-013       Cotter Pin 3/32" Dia. x .50"	18	717-1020	Miter Gear 15T		49	741-0862	Ball Detent .250" Dia.	
1.0" O.D. Pan Head Scr. ¼-20 x .50" Lg. w/Patch Axle R.H. Sleeve Bearing ¾" I.D. x 1.0" Lg. Oil Seal ¾" I.D. Flange Bearing ¾" I.D. x 15/16" Lg. Fl-Wash760" I.D. x 1.49" O.D. T17-0673 T17-0673 T17-0777 Differential Housing Ass'y. T10-0862  Dia. HT Needle Brg. 5/8" I.D. x ½" Lg. T41-0335 Fl-Wash 5/8" I.D. x 1.00" Lg. T41-0335 Fl-Wash. 5/8" I.D. x .030 Fl-Wash. 5/8" I.D. x .040 Fl-Wash. 5/8" I.D. x .040 T1-0339 Fl-Wash760" I.D. x 1.49" O.D. T17-0673 T17-0673 T17-0673 T17-0777 Differential Housing Ass'y. T17-0796 Sq. Hd. Bolt 5/16-24 Thd. Cotter Pin 3/32" Dia. x .50"	19	716-0142	Snap Ring		50	732-0863	Spring Detent	
21       710-0862       Pan Head Scr. ¼-20 x .50" Lg. w/Patch       52       741-0335       Needle Brg. 5/8" I.D. x ½" Lg.         22       717-1012       Axle R.H.       53       710-0855       Hex Bolt ¼-20 x 1.00" Lg.         23       741-0340       Sleeve Bearing ¾" I.D. x 1.0" Lg.       54       736-0336       Fl-Wash. 5/8" I.D. x .030         24       721-0179       Oil Seal ¾" I.D. x 1.0.       54B 736-0337       Fl-Wash. 5/8" I.D. x .040         25       741-0339       Flange Bearing ¾" I.D. x 1.50" Lg.       55 741-0343       Actuating Pin 5/16" Dia.         26       736-0188       Fl-Wash760" I.D. x 1.49" O.D.       57 717-1059       Differential Gear 72T Ass'y. w/Bearing Sq. Hd. Bolt 5/16-24 Thd. Cotter Pin 3/32" Dia. x .50"         27       717-0777       Differential Housing Ass'y. Comes with Ref. 28       58 717-0796       Sq. Hd. Bolt 5/16-24 Thd. Cotter Pin 3/32" Dia. x .50"	20	717-0690			51	714-0169	#9 Hi-Pro Key 3/16" x 3/4"	
Lg. w/Patch Axle R.H. Sleeve Bearing ¾" I.D. x 1.0" Lg. Oil Seal ¾" I.D. x 15/16" Lg. Fl-Wash760" I.D. x 1.49" O.D. T17-0673 T17-0777 Differential Housing Ass'y. T27-0179 Comes with Ref. 28  Lg. Hex Bolt ¼-20 x 1.00" Lg. Fl-Wash. 5/8" I.D. x .030 Fl-Wash. 5/8" I.D. x .040 Fl-Wash. 5/8" I.D. x .020 Fl			1.0" O.D.					
22       717-1012       Axle R.H.       53       710-0855       Hex Bolt ¼-20 x 1.00" Lg.         23       741-0340       Sleeve Bearing ¾" I.D. x 1.0" Lg.       54       736-0336       Fl-Wash. 5/8" I.D. x .030         24       721-0179       Oil Seal ¾" I.D. Flange Bearing ¾" I.D. x 15/16" Lg.       54B 736-0337       Fl-Wash. 5/8" I.D. x .020         25       741-0339       Fl-Wash760" I.D. x 1.49" O.D.       55 741-0343       Actuating Pin 5/16" Dia. Hex Bolt ¼-20 x 1.50" Lg. (Grade 5)         26       736-0188       Fl-Wash760" I.D. x 1.49" O.D.       57 717-1059       Differential Gear 72T Ass'y. w/Bearing         27       717-0673       Cross Shaft Differential Housing Ass'y. Comes with Ref. 28       58 717-0796       Sq. Hd. Bolt 5/16-24 Thd. Cotter Pin 3/32" Dia. x .50"	21	710-0862			52	741-0335		
23       741-0340       Sleeve Bearing ¾" I.D. x 1.0" Lg.       54       736-0336 Fl-Wash. 5/8" I.D. x .040         24       721-0179       Oil Seal ¾" I.D. x .020       54B 736-0337 Fl-Wash. 5/8" I.D. x .020         25       741-0339       Flange Bearing ¾" I.D. x .020         26       736-0188       Fl-Wash760" I.D. x 1.49" O.D. x .020         27       717-0673 Cross Shaft Differential Housing Ass'y. 29       58       717-0796 Sq. Hd. Bolt 5/16-24 Thd. Cotter Pin 3/32" Dia. x .50"	22	717-1012			53	710-0855		
24       721-0179       Oil Seal ¾" I.D.       54A 736-0337       Fl-Wash. 5/8" I.D. x .040         25       741-0339       Flange Bearing ¾" I.D. x .05/16" Lg.       55 741-0343       Actuating Pin 5/16" Dia. Hex Bolt ¼-20 x 1.50" Lg. (Grade 5)         26       736-0188       Fl-Wash760" I.D. x 1.49" O.D.       57 717-1059       Differential Gear 72T Ass'y. w/Bearing Sq. Hd. Bolt 5/16-24 Thd. Cotter Pin 3/32" Dia. x .50"								
24       721-0179       Oil Seal ¾" I.D.       54B 736-0349       FI-Wash. 5/8" I.D. x .020         25       741-0339       Flange Bearing ¾" I.D. x .020       55 741-0343       Actuating Pin 5/16" Dia.         26       736-0188       FI-Wash760" I.D. x 1.49" O.D.       56 710-0886       Hex Bolt ¼-20 x 1.50" Lg. (Grade 5)         27       717-0673       Cross Shaft Differential Housing Ass'y. Comes with Ref. 28       58 717-0796       Sq. Hd. Bolt 5/16-24 Thd. Cotter Pin 3/32" Dia. x .50"								
25       741-0339       Flange Bearing ¾" I.D. x 15/16" Lg.       55       741-0343 710-0886       Actuating Pin 5/16" Dia. Hex Bolt ¼-20 x 1.50" Lg. (Grade 5)         26       736-0188       Fl-Wash760" I.D. x 1.49" O.D.       57       717-1059       Differential Gear 72T Ass'y. w/Bearing Sq. Hd. Bolt 5/16-24 Thd. Cotter Pin 3/32" Dia. x .50"	24	721-0179						
15/16" Lg.   56   710-0886   Hex Bolt ¼-20 x 1.50" Lg.   (Grade 5)		741-0339			55	741-0343	Actuating Pin 5/16" Dia.	
26       736-0188       FI-Wash760" I.D. x 1.49" O.D.       57       717-1059       (Grade 5) Differential Gear 72T Ass'y. w/Bearing Sq. Hd. Bolt 5/16-24 Thd. Comes with Ref. 28         28       717-0777 Ocomes with Ref. 28       58       717-0796 717-0796       Sq. Hd. Bolt 5/16-24 Thd. Cotter Pin 3/32" Dia. x .50"				į		710-0886		
O.D. Cross Shaft Differential Housing Ass'y. 28 717-0777 Differential Housing Ass'y. 29 — Comes with Ref. 28 57 717-1059 Differential Gear 72T Ass'y. w/Bearing Sq. Hd. Bolt 5/16-24 Thd. Cotter Pin 3/32" Dia. x .50"	26	736-0188						
27   717-0673   Cross Shaft					57	717-1059		
28   717-0777   Differential Housing Ass'y.   58   717-0796   Sq. Hd. Bolt 5/16-24 Thd.   Comes with Ref. 28   59   1544-013   Cotter Pin 3/32" Dia. x .50"	27	717-0673						
29 — Comes with Ref. 28 59 1544-013 Cotter Pin 3/32" Dia. x .50"					58	717-0796		
		_				1544-013		
30 717-1019 Miter Gear Lg.		717-1019						
31 712-0200 Hex Ins. L-Nut ½-20 Thd. — 737-0148 Grease—Shell (10 oz.)					<b> </b> —	737-0148		

<sup>\*\*</sup>Ref. No. 15 736-0349 Fl-Wash. 5/8" I.D. x 1.0" O.D. x .020 Thk. 736-0336 Fl-Wash. 5/8" I.D. x 1.0" O.D. x .030 Thk. 736-0337 Fl-Wash. 5/8" I.D. x 1.0" O.D. x .040 Thk.

At the time of manufacture of lawn tractor, the optional accessories listed below are available.

Description	Stock No.
36" Snow Thrower	89-33848R
42" Snow Blade	89-33879R
Grass Catcher	89-35106R
38" Lawn Sweeper	89-37952R
30 Lb. Wheel Weights	89-33862R
Gang Reel	89-27R



#### PARTS LIST FOR ELECTRICAL SYSTEM

REF. NO.	PART NO.	DESCRIPTION	NEW PART	REF. NO.	PART NO.	DESCRIPTION	NEW PART
1	725-1128	Taillight (TMO-33921A Only)		11	725-0916	Grounding Wire	
2	725-0459	Circuit Breaker		12	725-0976	Ground Wire 7.25" Lg.	
3	725-0759	Spring Switch		13	725-1188	Wire Harness (TMO-33921A)	
4	725-0975	Ground Wire 9.0" Lg.	1	ļ	725-1187	Wire Harness (TMO-33920A)	
5	725-0201	Ignition Key		14	725-0634	Light Switch	
6	725-0267	Ignition Switch		15	725-0803	Safety Switch	
7	725-0925	Ammeter		16	725-0771	Solenoid	
8	725-0577	Safety Switch		17	725-0926	Elec. Wire w/Bolt	
9	725-1058	Socket-Headlight		18	725-0514	12-V Battery	
10	725-0963	Lamp—Headlight				,,	

#### SERVICE NATIONWIDE

# Montgomery Ward

# HOW TO OBTAIN REPLACEMENT PARTS AND SERVICE

The merchandise you have purchased from us has been carefully engineered and manufactured under Montgomery Ward's rigid quality standards and should give you satisfactory and dependable operation. However, like all mechanical merchandise, it may occasionally require adjustment, replacement parts or maintenance.

#### **Toll Free Parts Sales Center**

When you need a replacement part or accessory for a major appliance, home electronic item or lawn and garden product that is not under warranty or covered by a service contract or if you need the location of the nearest service facility, call our Parts Sales Center toll free 1-800-323-1965.

#### Provide the following:

- 1.  $\,$  M  $_{\odot}$  al, serial number and all of the other data shown on the model plate.
- 2. Also give the part number or numbers as shown in the parts list that came with the product.

Replacement Parts will be made available at current prices. If requested, prices will be quoted in advance when not listed.

If you order parts by mail, you will pay the transportation charges from the shipping point.

UNIT MODEL NO	
UNIT SERIAL NO	
ENGINE MODEL NO.	
TYPE NO.	
CODE NO	